



DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
1455 FRAZEE RD, SUITE 900
SAN DIEGO, CA 92108-4310

5090
Ser BPMOW.wed/0800
September 27, 2006

Mr. Devender Narala (1 copy + CD)
San Francisco Bay Regional
Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Ms. Alana Lee (3 copies + CD)
US EPA Region 9
75 Hawthorne Street (SFD-73)
San Francisco, CA 94105

Dear Mr. Narala and Ms. Lee:

Enclosed are cover pages and/or compact discs of the September 27, 2006, *Final Site 1 Landfill 2005 Annual Report* for your records. No comments were received on the April 19, 2006, *Draft Site 1 Landfill 2005 Annual Report*. Please replace the cover pages of the draft report with the enclosed pages. This report summarizes the Site 1 monitoring and maintenance activities for four quarterly events in 2005.

This report has been prepared for the Navy's environmental restoration at Moffett Field. Please contact me, at 619-532-0952, if you have any questions or need clarification.

Sincerely,

RICHARD C. WEISSENBORN
Base Realignment and Closure
Environmental Coordinator
By direction of the Director

Enclosure: 1. *Final Site 1 Landfill 2005 Annual Report*

Copy to:

Mr. Don Chuck (3 CDs)
National Aeronautics and Space Administration
Ames Research Center MS 218-1
Moffett Field, CA 94035

Mr. Chris Rummel (1 copy + CD)
Santa Clara County Dept of Environmental
Health
1555 Berger Drive, Suite 300
San Jose, CA 95112

Mr. George Cook (CD)
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3614

Ms. Laurie Sullivan (CD)
NOAA
c/o EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

5090
Ser BPMOW.wed/0800
September 27, 2006

Mr. Jim Hardwick (CD)
California Department of Fish and Game
Office of Spill Prevention and Response
1700 K St.
P.O. Box 944209
Sacramento, CA 94244-2090

Mr. Jacques Graber (1 copy + CD)
California Integrated Waste Management Board
1001 I Street
P.O. Box 4025
Sacramento, CA 95812-4025

Mr. Mark Littlefield (CD)
Habitat Conservation Division
US Fish and Wildlife Service
2800 Cottage Way
Room W-2605
Sacramento, CA 95825

Mr. Dan Buford (CD)
Endangered Species Division
US Fish and Wildlife Service
2800 Cottage Way
Room W-2605
Sacramento, CA 95825

Mr. Bill Schaal (CD)
TN & Associates
688 Tiburon Ave.
Vacaville, CA 95687

Mr. Gary Munekawa (CD)
ROICC Moffett Federal Airfield
P.O. Box 68 (Building 107)
Moffett Field, CA 94035-0068

Mr. Dan Wallace (CD)
532 Tyrella #18
Mountain View, CA 94043

Mr. Carl Honaker (CD)
2500 Cunningham Ave.
San Jose, CA 95148

Mr. Ed Schlosser (CD)
304 Pacific Dr.
Mountain View, CA 94043

Ms. Kim Walsh (1 copy + CD)
TechLaw Inc.
90 New Montgomery St. Suite 1010
San Francisco, CA 94105

Mr. Kevin Woodhouse (CD)
City of Mountain View
P.O. Box 7540
Mountain View, CA 94039

Mr. Jim McClure (CD)
4957 Northdale Dr.
Fremont, CA 94536

Mr. Stuart McGee (CD)
700 All America Way
Sunnyvale, CA 94088-3707

Ms. Jane Turnbull (CD)
64 Los Altos Square
Los Altos, CA 94022

Mr. Steve Williams (CD)
1734 W. El Camino Real #10
Mountain View, CA 94040

Mr. Bob Moss (CD)
4010 Orme St.
Palo Alto, CA 94306



**Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108**

**FINAL
SITE 1 LANDFILL
2005 ANNUAL REPORT
Revision 1
September 27, 2006**

**FORMER NAVAL AIR STATION MOFFETT FIELD
MOFFETT FIELD, CALIFORNIA**

Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108

CONTRACT No. N68711-98-D-5713
CTO No. 0086

FINAL
SITE 1 LANDFILL 2005 ANNUAL REPORT
Revision 1
September 27, 2006

FORMER NAVAL AIR STATION MOFFETT FIELD
MOFFETT FIELD, CALIFORNIA

DCN: FWSD-RAC-06-0663



TETRA TECH EC, INC.

1230 Columbia Street, Suite 500
San Diego, CA 92101

Gordon Jamieson for

Gordon Jamieson
Project Manager

Dennis Goldman

Dennis Goldman, Ph.D., PG #4509
Consulting Hydrogeologist

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ABBREVIATIONS AND ACRONYMS

| | |
|------------------|---|
| µg/L | micrograms per liter |
| µmhos/cm | micromhos per centimeter |
| °C | degrees Celsius |
| bgs | below ground surface |
| BHC | benzene hexachloride |
| CCL | calculated concentration limit |
| COC | constituent of concern |
| DEH | Santa Clara County Department of Environmental Health |
| DO | dissolved oxygen |
| DUP | duplicate sample |
| EPA | United States Environmental Protection Agency |
| ft | feet |
| ft/ft | foot per foot |
| GS | ground surface |
| GV | gas vent |
| J | estimated value |
| LGMW | landfill gas monitoring well |
| LTMP | Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan |
| Maintenance Plan | Final Site 1 Landfill Post-Closure Long-Term Maintenance Plan |
| MDL | method detection limit |
| mg/L | milligrams per liter |
| Moffett | former Naval Air Station Moffett Field |
| MP | monitoring parameter |
| msl | mean sea level |
| mV | millivolts |
| NAD | North American Datum |
| NAS | Naval Air Station |
| NASA | National Aeronautics and Space Administration |
| NGVD | National Geodetic Vertical Datum |
| NTU | nephelometric turbidity unit |

ABBREVIATIONS AND ACRONYMS

(Continued)

| | |
|-----------|---|
| ORP | oxidation reduction potential |
| OU1 | Operable Unit 1 |
| pH | hydrogen (ion) concentration |
| ROD | Record of Decision |
| SQL | sample quantitation limit |
| SVOC | semivolatile organic compound |
| Tech Memo | Final Technical Memorandum, Site 1 Groundwater Evaluation Process |
| ToC | top of casing |
| TtFW | Tetra Tech FW, Inc. |
| U | analyte not detected above method reporting limit |
| USFWS | United States Fish and Wildlife Service |
| VOC | volatile organic compound |

EXECUTIVE SUMMARY

This document summarizes the 2005 monitoring and maintenance activities conducted at the Site 1 Landfill and presents the results of evaluating the post-closure groundwater monitoring data collected at the Site 1 Landfill in 2005. The content of this report meets the requirements of the *Moffett Federal Airfield Final Operable Unit 1 Record of Decision* and the Title 27 California Code of Regulations, Subchapter 3. The Site 1 Landfill is located at the northern end of the former Naval Air Station Moffett Field, located near Mountain View, California.

Depth-to-groundwater measurements, groundwater sampling, and methane monitoring were conducted at the Site 1 Landfill in April and October 2005 in accordance with the *Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan* issued in March 2005. Groundwater samples were collected from nine monitoring wells, as well as from collection trench well W1-22. Collection trench well W1-23 could not be sampled due to insufficient water. The analytical monitoring parameters (MPs) include selected metals, volatile organic compounds (VOCs), pesticides, and semivolatile organic compounds (SVOCs).

SVOCs and mercury were analyzed in supplemental groundwater sampling events in January and March 2005 because SVOCs and mercury were not analyzed historically at Site 1. SVOCs and mercury were not detected in these sampling events. Water level measurements also were taken during these supplemental sampling events.

Depth to groundwater measurements were collected from Site 1 Landfill monitoring wells, piezometers, and collection trench wells on January 31, March 7, April 11, and October 3, 2005. The groundwater elevations were similar to previous years. The groundwater flows from north to south at the Site 1 Landfill. The water levels in monitoring well pairs generally show upward potential. Most monitoring wells had seasonal high water levels in March 2005 and seasonal low water levels in October 2005. The seasonal water level fluctuation was on the order of approximately 1 foot.

MP analytical results of 2005 groundwater sampling at Site 1 were evaluated in accordance with the procedures provided in the *Final Technical Memorandum, Site 1 Groundwater Evaluation Process* (Tech Memo) issued in April 2004. The Tech Memo provided calculated concentration limits (CCLs) for the MPs that were developed based on ecological screening criteria and site-specific attenuation factors for the groundwater. These CCLs are used as initial screening criteria in the groundwater evaluation.

During 2005, no reported VOC or SVOC MP concentrations were greater than the applicable CCLs. Barium concentrations were greater than the applicable CCL in samples from every

monitoring well during both semiannual sampling events in 2005. However, the exceedances were less than historical background levels. Therefore, there was no release from the landfill. Heptachlor was also detected at a concentration greater than the applicable CCL during the April 2005 sampling event. However, the detection was in a sample from a background monitoring well and there was no release from the landfill.

As part of landfill monitoring activities, methane monitoring was conducted for 19 passive gas vent wells within the Site 1 Landfill and 4 landfill gas monitoring wells on the perimeter of the landfill. Methane monitoring was also performed at the perimeter of the site at 150-foot intervals at 21 locations. In general, the percentages of methane gas concentrations within the landfill were lower in October 2005 than in April 2005 and were similar to historical concentrations. None of the perimeter wells showed concentrations of methane above the Title 27 concentration limit of 5 percent (all readings were zero percent). Methane was not detected at any of the perimeter monitoring locations in April or October 2005.

Maintenance activities were conducted at the Site 1 Landfill during 2005 in accordance with the *Final Site 1 Landfill Post-Closure Long-Term Maintenance Plan* issued in March 2005. These activities included inspection and repair, as required, of the landfill cover (including cutting the grass and the weeds), the raptor perches, landfill gas vents and monitoring wells, groundwater monitoring wells, piezometers, collection trench wells, and stormwater runoff controls. Santa Clara County Department of Environmental Health inspected Site 1 quarterly in 2005. No problems or deficiencies were identified.

1.0 INTRODUCTION

This document summarizes the 2005 monitoring and maintenance activities conducted at the Site 1 Landfill and presents the results of evaluating the post-closure groundwater monitoring data collected at the Site 1 Landfill in 2005. The content of this report meets the requirements of the *Moffett Federal Airfield Final Operable Unit 1 [OU1] Record of Decision [ROD]* and Title 27 California Code of Regulations, Subchapter 3. The Site 1 Landfill is located at the northern end of the former Naval Air Station Moffett Field (Moffett), located near Mountain View, California (Figure 1-1 and Figure 1-2). This report was prepared on behalf of the Base Realignment and Closure Program Management Office West. This work was conducted under Contract Task Order Number 0086, issued under Remedial Action Contract No. N68711-98-D-5713.

The purpose of this Annual Report is to present the results of groundwater monitoring and methane monitoring conducted in 2005 for the detection monitoring program at the Site 1 Landfill. It also includes a description of maintenance conducted at the Site 1 Landfill during 2005. Appendices A through F include field sampling data, analytical data, statistical evaluation, analytical data validation packages, groundwater hydrographs, groundwater monitoring point data graphs, and methane monitoring data graphs.

1.1 SITE LOCATION

Moffett is located about 1 mile south of the San Francisco Bay in Santa Clara County, California (see Figure 1-1). Moffett is bounded by United States Fish and Wildlife Service (USFWS) property to the north, Stevens Creek to the west, U.S. Highway 101 to the south, and Lockheed Martin to the east (see Figure 1-2).

The Site 1 Landfill is located in the northernmost portion of Moffett and encompasses approximately 12 acres. The Site 1 Landfill (historically referred to as the Runway Landfill) lies at the north end of the runways between North Perimeter Road, the USFWS property, and the Stormwater Retention Basin (see Figure 1-2).

1.2 2005 MONITORING AND MAINTENANCE ACTIVITIES

Monitoring activities conducted in 2005 at Site 1 included depth to groundwater measurements, groundwater sampling, and methane monitoring. Groundwater monitoring at Site 1 was conducted during 2005 in accordance with the *Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan* (LTMP) (Tetra Tech FW, Inc. [TtFW], 2005a). The groundwater evaluation process was conducted in accordance with the *Technical Memorandum, Site 1 Groundwater Evaluation Process* (Tech Memo) (TtFW, 2004), which was finalized in April 2004. Maintenance activities in 2005 at Site 1 were conducted in accordance with the *Final Site 1 Landfill Post-Closure Long-Term Maintenance Plan* (Maintenance Plan) (TtFW, 2005b).

As approved by the regulatory agencies, the sampling frequency and analyses were modified in accordance with the Tech Memo and the LTMP. Groundwater samples were collected semiannually and analyzed for the Site 1 monitoring parameters (MPs). Methane monitoring was conducted in accordance with Section 4 of the LTMP.

Depth to groundwater measurements, groundwater sampling, and methane monitoring were conducted at the Site 1 Landfill in April and October 2005. Groundwater samples were collected from nine monitoring wells and from collection trench well W1-22. Collection trench well W1-23 could not be sampled because of insufficient water. Table 1-1 provides well construction information for all Site 1 monitoring wells. The analytical MPs include selected metals, volatile organic compounds, pesticides, and semivolatile organic compounds (SVOCs).

SVOCs and mercury sampling were conducted as supplemental groundwater sampling events in January and March 2005 because SVOCs and mercury were not analyzed historically at Site 1. Water level measurements also were taken during these supplemental sampling events.

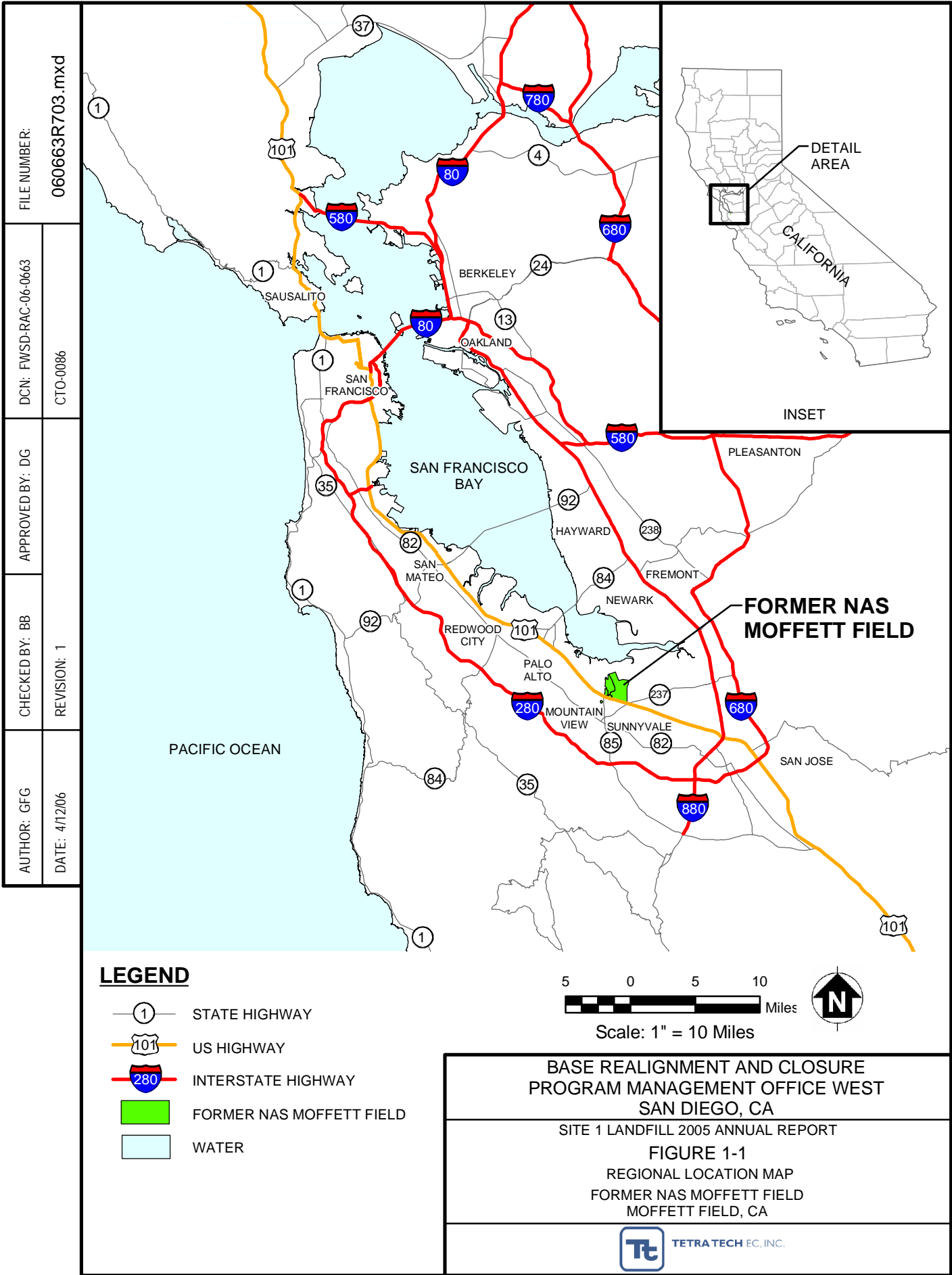
Maintenance activities were conducted at the Site 1 Landfill during 2005 in accordance with the Maintenance Plan. These activities include inspection and repair, as necessary, of the landfill cap, stormwater runoff and control measures, raptor perches, landfill gas vents, perimeter landfill gas monitoring wells, the landfill gas-venting trench and gas vents, collection trench and collection trench wells, and groundwater monitoring wells and piezometers. Site 1 inspections were conducted in January, February, May, August, and November 2005. Inspection checklists and maintenance activities are provided in Appendix G.

Santa Clara County Department of Environmental Health (DEH) also inspects the Site 1 Landfill quarterly. Neither problems nor deficiencies were noted during DEH inspections. The DEH inspection reports are provided in Appendix G.

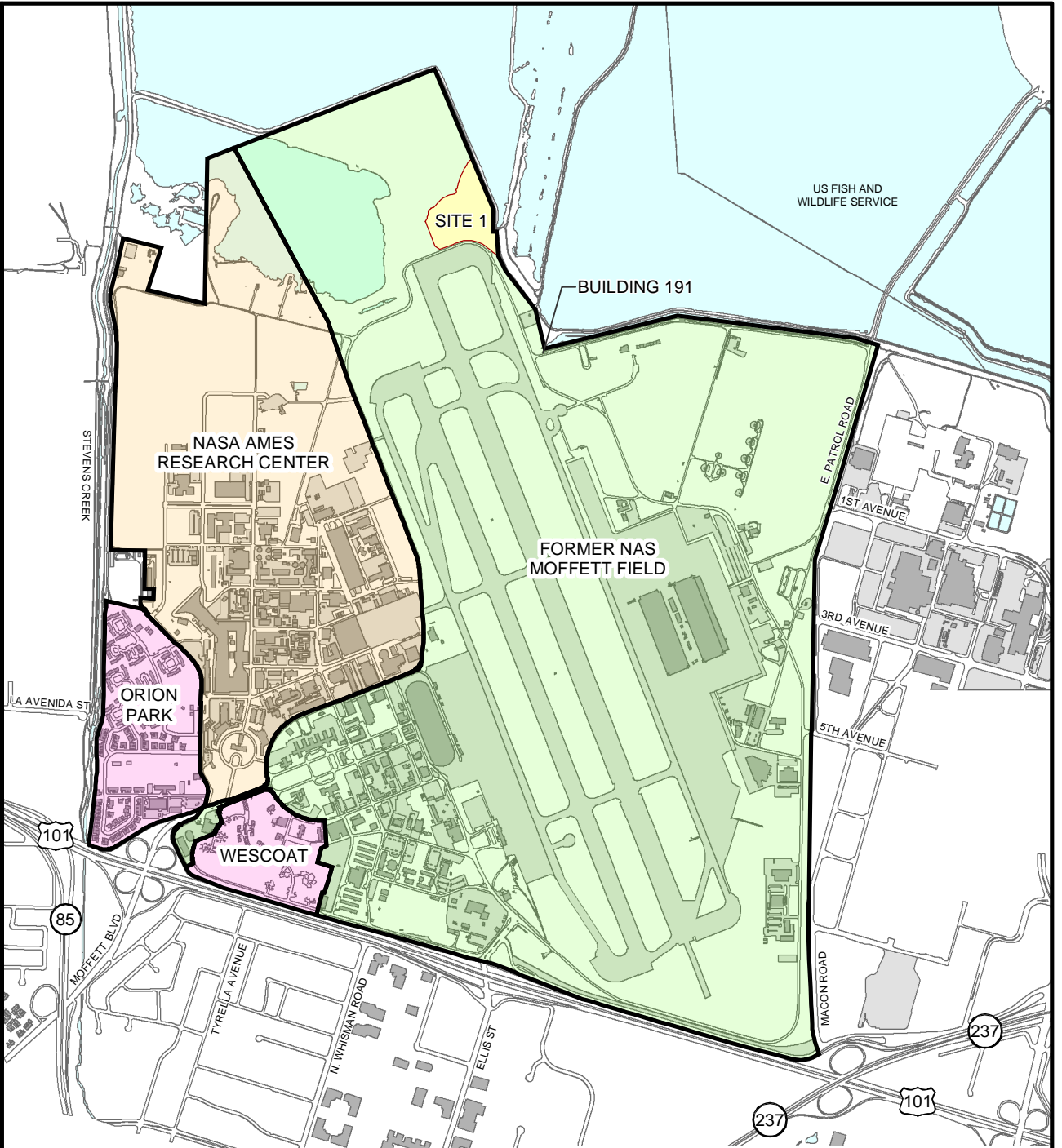
1.3 BASIS OF DATA EVALUATION

Remedial activities at Moffett are conducted as part of the Installation Restoration Program established by the Department of Defense to identify, evaluate, and control the spread of contaminants from historical hazardous waste sites. The Site 1 Landfill is in OU1. The content of this report meets the requirements stated in the ROD (Navy, 1997) for OU1 and Title 27 California Code of Regulations, Subchapter 3.








The ROD for OU1 (Navy, 1997) summarizes site characteristics and risks, describes and evaluates the remedial alternatives, identifies the selected remedy, and identifies statutory determinations (including compliance with applicable or relevant and appropriate requirements). The major elements of the selected remedy for the Site 1 Landfill are a landfill cap, landfill gas-venting trench, subsurface collection trench, groundwater and methane monitoring, institutional controls, and post-closure maintenance. Remedial actions were completed in November 1998, and methane and groundwater monitoring began in 1999.



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| | CTO-0086 | | REVISION: 1 | DATE: 4/12/06 |



LEGEND

-  ROAD
-  PAVED SURFACE
-  BUILDING
-  WATER
-  FORMER NAS MOFFETT FIELD
-  NASA AMES RESEARCH CENTER
-  MOFFETT COMMUNITY HOUSING

SOURCE: RECORD OF SURVEY FORMER NAS MOFFETT FIELD, MARCH 2000, NASA.

1,000 0 1,000 2,000 Feet

Scale: 1" = 2000'



BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CA

SITE 1 LANDFILL 2005 ANNUAL REPORT

FIGURE 1-2

SITE LOCATION MAP

FORMER NAS MOFFETT FIELD
MOFFETT FIELD, CA



TETRA TECH EC, INC.

TABLE 1-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
WELL CONSTRUCTION INFORMATION
FORMER NAS MOFFETT FIELD**

| Location | Northing (feet) | Easting (feet) | Diameter (inches) | ToC Elevation (feet) ¹ | GS Elevations (feet) ¹ | Total Well Depth (feet bgs) | Depth of Screen Interval (feet bgs) |
|---------------------|--------------------|-------------------|----------------------|---|---|-----------------------------------|---|
| W1-1R | 1982659.6 | 6111220.3 | 4 | 4.83 | 2.21 | 25.5 | 14.3 - 24.3 |
| W1-5 | 1983794.1 | 6110944.4 | 4 | 3.02 | 1.92 | 21.5 | 14.5 - 19.5 |
| W1-6 | 1982637.3 | 6110949.3 | 4 | -0.56 | 0.47 | 34.0 | 15.0 - 30.0 |
| W1-7 | 1982901.0 | 6110315.6 | 4 | 0.24 | 0.04 | 75.0 | 40.0 - 70.0 |
| W1-8 | 1983376.9 | 6111117.5 | 4 | 2.95 | 1.07 | 25.0 | 13.0 - 18.0 |
| W1-12R | 1983385.0 | 6110711.3 | 4 | 0.17 | 0.08 | 22.0 | 11.7 - 21.7 |
| W1-14 | 1982829.9 | 6110399.9 | 2 | 2.46 | -0.72 | 14.1 | 4.1 - 14.1 |
| W1-15 | 1982790.0 | 6110909.9 | 2 | 2.60 | -0.25 | 14.4 | 4.4 - 14.4 |
| W1-16 | 1982900.5 | 6111204.4 | 2 | 3.82 | 1.35 | 15.4 | 5.4 - 15.4 |
| W1-19 | 1982709.2 | 6110545.2 | 2 | 1.98 | -0.43 | 19.0 | 14.0 - 19.0 |
| W1-20 | 1982767.6 | 6110817.0 | 2 | 2.72 | -0.11 | 19.0 | 14.0 - 19.0 |
| W1-22 ² | 1983496.9 | 6110774.9 | 8 | 1.12 | 2.10 | 7.0 | 2.5 - 7.0 |
| W1-23 ² | 1983212.8 | 6110510.7 | 8 | 0.83 | 2.18 | 7.0 | 2.5 - 7.0 |
| W1-24 | 1983156.0 | 6111212.9 | 4 | 4.27 | 1.88 | 24.5 | 6.0 - 16.0 |
| PZ1-18 ³ | 1982709.9 | 6110549.7 | 2 | 2.25 | -0.29 | 40.0 | 30.0 - 40.0 |
| PZ1-21 ³ | 1982770.6 | 6110822.3 | 2 | 2.28 | -0.13 | 40.0 | 30.0 - 40.0 |

Notes:

¹ ToC referenced to survey conducted during November 2002, with the exception of W1-12R and W1-1R, which were surveyed in October 2003 and November 2004, respectively.

² W1-22 and W1-23 are collection trench wells and not groundwater monitoring wells.

³ PZ1-18 and PZ1-21 are piezometers and not groundwater monitoring

Positions were determined using NASA Ames Research Center Control Monument ARC-32, a disc set flush in concrete, 6.5 feet north of northeast edge of pavement (Patrol Road) and 75 feet east of Perimeter Road, and 2.5 feet west of the chain-link fence.

Northings and eastings are shown in NAD83, elevations are shown in NGVD29.

Measuring point is recorded from top of well casing.

The screen interval for replacement wells W1-1R and W1-12R are similar to those of the original wells they replaced (within 1 foot of the screen interval for the original wells).

Abbreviations and Acronyms:

bgs - below ground surface

GS - ground surface

NAD - North American Datum

NAS - Naval Air Station

NASA - National Aeronautics and Space Administration

NGVD - National Geodetic Vertical Datum

ToC - top of casing

The evaluation of Site 1 groundwater analytical results presented in this report was conducted in accordance with the Tech Memo (TtFW, 2004). The Tech Memo documented the groundwater detection monitoring program, MPs, calculated concentration limits (CCLs), and described the statistical evaluation process for the Site 1 Landfill post-closure monitoring. The MPs are a set of parameters that provide a reliable indication of a release from a landfill. The MPs include physical and analytical parameters that are a subset of the constituents of concern (COCs). The CCLs were developed based on ecological screening criteria and site-specific attenuation factors for the groundwater. These CCLs are used as initial screening criteria in the groundwater evaluation. If analytical results are less than the CCLs, then no additional evaluation is required, and there is no release from the landfill. If CCLs are exceeded, then additional evaluation of upgradient (background) and downgradient data is conducted to determine whether there has been a release from the landfill. Appendices A and B of this document contain the field sampling data and analytical summary and CCL evaluation tables.

1.4 REPORT ORGANIZATION

This report is divided into the following sections:

- **Section 1.0: Introduction**, presents the site location, monitoring and maintenance activities, the basis of the data evaluation, and the report organization.
- **Section 2.0: Groundwater Hydraulics**, presents the Site 1 groundwater gradient, flow direction, and water level trends.
- **Section 3.0: Groundwater Sampling**, summarizes the Site 1 groundwater analytical data and presents the results of the evaluation of the groundwater data.
- **Section 4.0: Methane Monitoring**, summarizes the Site 1 methane monitoring data in the landfill gas monitoring wells, the landfill gas vents, and the perimeter gas monitoring points.
- **Section 5.0: Conclusions**, presents the conclusions and recommendations.
- **Section 6.0: References**, presents the references for this report.
- **Tables and figures** are incorporated into the text.
- **Appendix A** contains the field sampling data sheets.
- **Appendix B** contains a summary of the analytical tables and the CCL tables.
- **Appendix C** presents the Site 1 groundwater validated analytical results.
- **Appendix D** provides hydrographs of the Site 1 groundwater monitoring wells, piezometers, and collection trench wells.
- **Appendix E** provides time-series concentration graphs of monitoring points for each monitoring parameter that was detected in 2005.
- **Appendix F** provides time-series methane concentration graphs of the landfill gas monitoring wells and landfill gas vents.

- **Appendix G** provides the 2005 general site inspection reports and the 2005 Santa Clara County landfill inspection reports.
- **Appendix H** provides correspondence from 2005.

2.0 GROUNDWATER HYDRAULICS

This section describes the Site 1 hydrogeology, groundwater gradient and flow direction, and water level trends.

The stratigraphy of the Site 1 Landfill is a complex interfingering of fine-grained units representing the boundary between alluvial and estuarine environments and fluctuations of the boundary caused by changes in sea level. Lithologic logs from shallow well borings indicate that the uppermost materials (zero to 60 feet below ground surface) are comprised of silts to silty clays, which are brown to black and moderately plastic in nature. Intermittent throughout the upper 60 feet are interfingered silty sands and clayey gravels, which are medium gray to black or brown. These materials are present as lenses or stringers and are not laterally or vertically continuous throughout the site.

Most of the groundwater elevations in the Site 1 Landfill groundwater monitoring wells are below mean sea level. The vadose zone, between the saturated zone and the land surface, consists of either imported fill material or clayey soils.

Shallow subsurface soil samples within the Site 1 Landfill and surrounding the site, taken below the landfill but above the permeable lenses within the upper portion of the shallow aquifer, were tested for porosity and permeability. The results indicate that soils below the landfill and above the shallow aquifer are generally clays with hydraulic conductivity values in the 10^{-8} centimeter-per-second range (appropriate for clayey material [Freeze and Cherry, 1979]).

Groundwater in the upper portion of the shallow aquifer beneath the landfill generally flows north to south (Tetra Tech FW, Inc. [TtFW], 2004). The regional groundwater flow direction is south to north toward San Francisco Bay. The southward gradient underlying the Site 1 Landfill is opposite from the regional gradient because of active pumping of the Moffett storm drainage system. Pumping occurs at Building 191, located south of the Site 1 Landfill (see Figure 1-2). Building 191 began operating in the early 1950s. It consists of a subsurface concrete-lined vault, equipped with a passive pump, and receives water from nearby ditches and a French drain system underneath the runways (Tetra Tech EM, Inc., 2000). The pump station influences local groundwater gradients and reverses the local natural groundwater flow direction because the drainage system that feeds the pump station is below the water table in some areas.

Three water bodies are proximal to the Site 1 Landfill: the man-made ephemeral Stormwater Retention Basin to the north, former Jagel Slough to the southeast, and United States Fish and Wildlife Service property to the east (Figure 2-1). It appears that low-permeability barriers exist between the water bodies and the Site 1 Landfill, limiting subsurface water movement (Navy, 1997). As a result, head differences are maintained between each water body (International

Technology Corporation, 1993). Potential for flow from the landfill to the other bodies exists, but these restrictive barriers limit actual flow. Low-hydraulic conductivity, high-organic contents associated with the clays, and low-contaminant source concentrations combine to restrict flow and limit potential contaminant migration (Navy, 1997).

2.1 GROUNDWATER GRADIENT AND FLOW DIRECTION

Field activities, conducted at the Site 1 Landfill in 2005, included four water level gauging events at monitoring wells, piezometers, and collection trench wells (Table 2-1). This section describes the collection of 2005 water level measurements and summarizes groundwater flow direction beneath the Site 1 Landfill. Figure 2-1 shows the locations for Site 1 water level measurements.

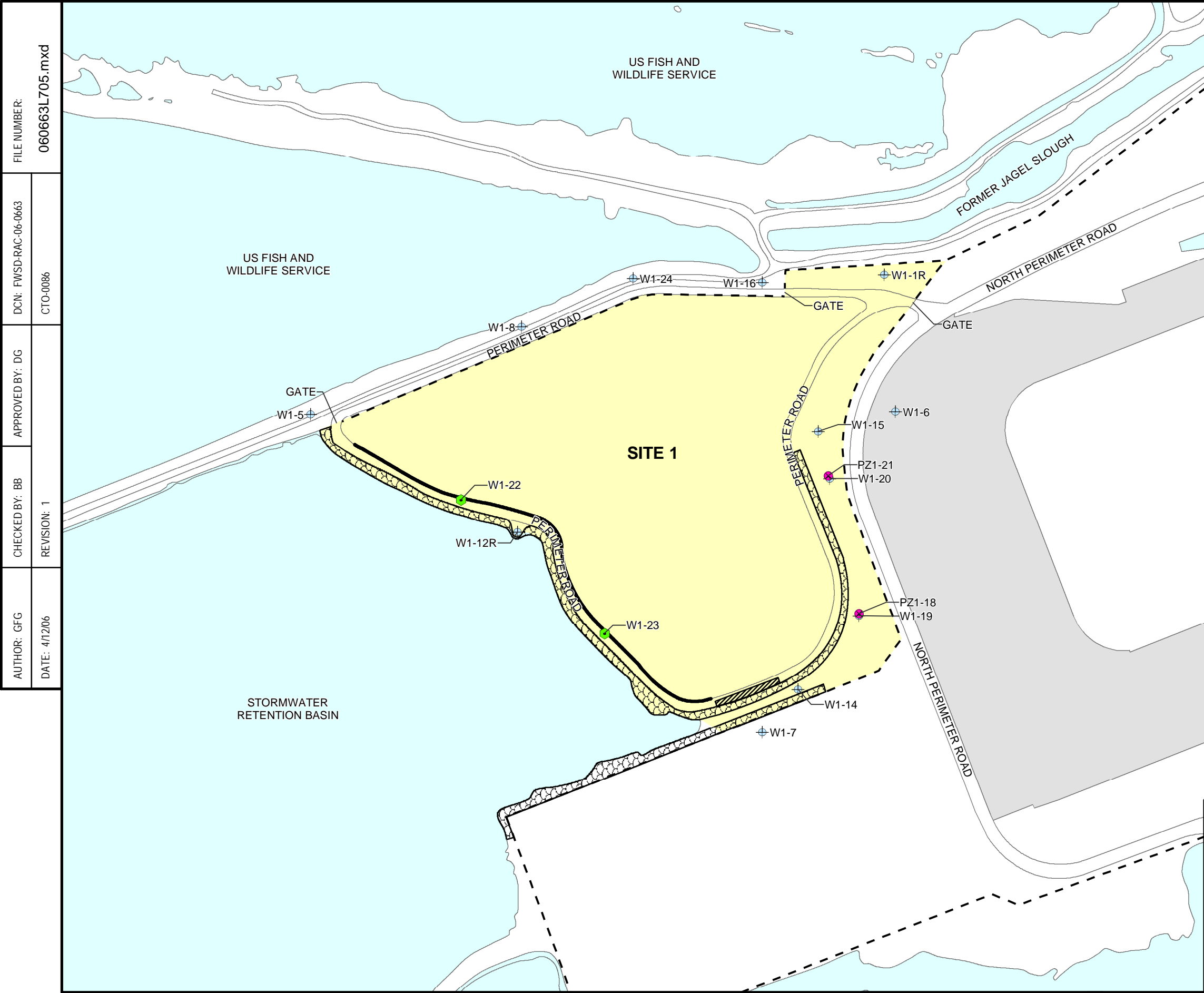
Measurements of depth to groundwater were made using an electronic measuring tape with markings every hundredth of a foot. All water levels were measured within a 24-hour period. Measurements were subtracted from surveyed measuring point elevations to calculate the groundwater level elevations.

Depth-to-groundwater measurements were collected from 12 monitoring wells, 2 piezometers, and 2 collection trench wells at the Site 1 Landfill on:

- January 31, 2005
- March 7, 2005
- April 11, 2005
- October 3, 2005

Groundwater elevations for all Site 1 Landfill groundwater measurements were below sea level for 2005. The potentiometric surfaces of the upper portion of the shallow aquifer, shown on Figure 2-2 through Figure 2-5, were based on groundwater elevations in monitoring wells of similar construction and screened in the upper portion of the shallow aquifer. For example, piezometers PZ1-18 and PZ1-21 and wells W1-6 and W1-7 were not considered in the contouring because they are screened at greater depths than the other wells and are not considered representative of the groundwater elevations in the upper portion of the shallow aquifer. In addition, collection trench wells W1-22 and W1-23 were not included, as they are screened within the collection trench north of the landfill and are not considered representative of groundwater elevations.

In general, the groundwater elevations were similar to previous years. Generally, the groundwater flows from north to south at the Site 1 Landfill. The gradient from north to south (W1-5 to W1-20) was approximately:



LEGEND

W1-5

GROUNDWATER MONITORING WELL

W1-22

COLLECTION TRENCH WELL

PZ1-18

PIEZOMETER

RIPRAP

GAS VENTING TRENCH

GROUNDWATER COLLECTION TRENCH

ROAD

SITE SECURITY FENCE

RUNWAY

WATER/WETLAND

100

0

100

200

Feet

Scale: 1" = 200'

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CA

SITE 1 LANDFILL 2005 ANNUAL REPORT
FIGURE 2-1
LOCATIONS FOR SITE 1 WATER LEVEL MEASUREMENTS
FORMER NAS MOFFETT FIELD
MOFFETT FIELD, CA

TETRA TECH EC, INC.

TABLE 2-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
2005 GROUNDWATER ELEVATIONS
FORMER NAS MOFFETT FIELD**

| Location | ToC Elevation (ft msl) | January 31, 2005 Depth to Water ¹ (ft) | January 31, 2005 Water Elevation (ft msl) | March 7, 2005 Depth to Water ¹ (ft) | March 7, 2005 Water Elevation (ft msl) | April 11, 2005 Depth to Water ¹ (ft) | April 11, 2005 Water Elevation (ft msl) | October 3, 2005 Depth to Water ¹ (ft) | October 3, 2005 Water Elevation (ft msl) |
|---------------------|------------------------------|---|---|--|--|---|---|--|--|
| W1-1R | 4.83 | 7.77 | -2.94 | 7.21 | -2.38 | 7.55 | -2.72 | 8.29 | -3.46 |
| W1-5 | 3.02 | 5.32 | -2.30 | 4.80 | -1.78 | 5.05 | -2.03 | 5.68 | -2.66 |
| W1-6 | -0.56 | 2.11 | -2.67 | 2.21 | -2.77 | 1.98 | -2.54 | 2.26 | -2.82 |
| W1-7 | 0.24 | 2.98 | -2.74 | 2.53 | -2.29 | 2.55 | -2.31 | 3.33 | -3.09 |
| W1-8 | 2.95 | 5.35 | -2.40 | 4.88 | -1.93 | 5.08 | -2.13 | 5.76 | -2.81 |
| W1-12R | 0.17 | 2.58 | -2.41 | 2.02 | -1.85 | 2.29 | -2.12 | 3.04 | -2.87 |
| W1-14 | 2.46 | 5.21 | -2.75 | 4.60 | -2.14 | 4.88 | -2.42 | 5.77 | -3.31 |
| W1-15 | 2.60 | 5.43 | -2.83 | 4.82 | -2.22 | 5.10 | -2.50 | 5.90 | -3.30 |
| W1-16 | 3.82 | 7.50 | -3.68 | 7.10 | -3.28 | 6.69 | -2.87 | 7.01 | -3.19 |
| W1-19 | 1.98 | 4.76 | -2.78 | 4.18 | -2.20 | 4.52 | -2.54 | 5.37 | -3.39 |
| W1-20 | 2.72 | 5.57 | -2.85 | 5.02 | -2.30 | 5.28 | -2.56 | 6.06 | -3.34 |
| W1-22 ² | 1.12 | 3.45 | -2.33 | 2.95 | -1.83 | 2.40 | -1.28 | 3.69 | -2.57 |
| W1-23 ² | 0.83 | 5.61 | -4.78 | 5.60 | -4.77 | 5.48 | -4.65 | 5.64 | -4.81 |
| W1-24 | 4.27 | 6.98 | -2.71 | 6.38 | -2.11 | 6.68 | -2.41 | 7.34 | -3.07 |
| PZ1-18 ³ | 2.25 | 5.10 | -2.85 | 5.04 | -2.79 | 4.62 | -2.37 | 4.74 | -2.49 |
| PZ1-21 ³ | 2.28 | 5.21 | -2.93 | 4.56 | -2.28 | 4.81 | -2.53 | 5.60 | -3.32 |

Note:

¹ - Depth to water may vary from field sampling data forms (Appendix A). Data were collected on separate dates.

² - W1-22 and W1-23 are collection trench wells, not groundwater monitoring wells.

³ - PZ1-18 and PZ1-21 are piezometers, not groundwater monitoring wells.

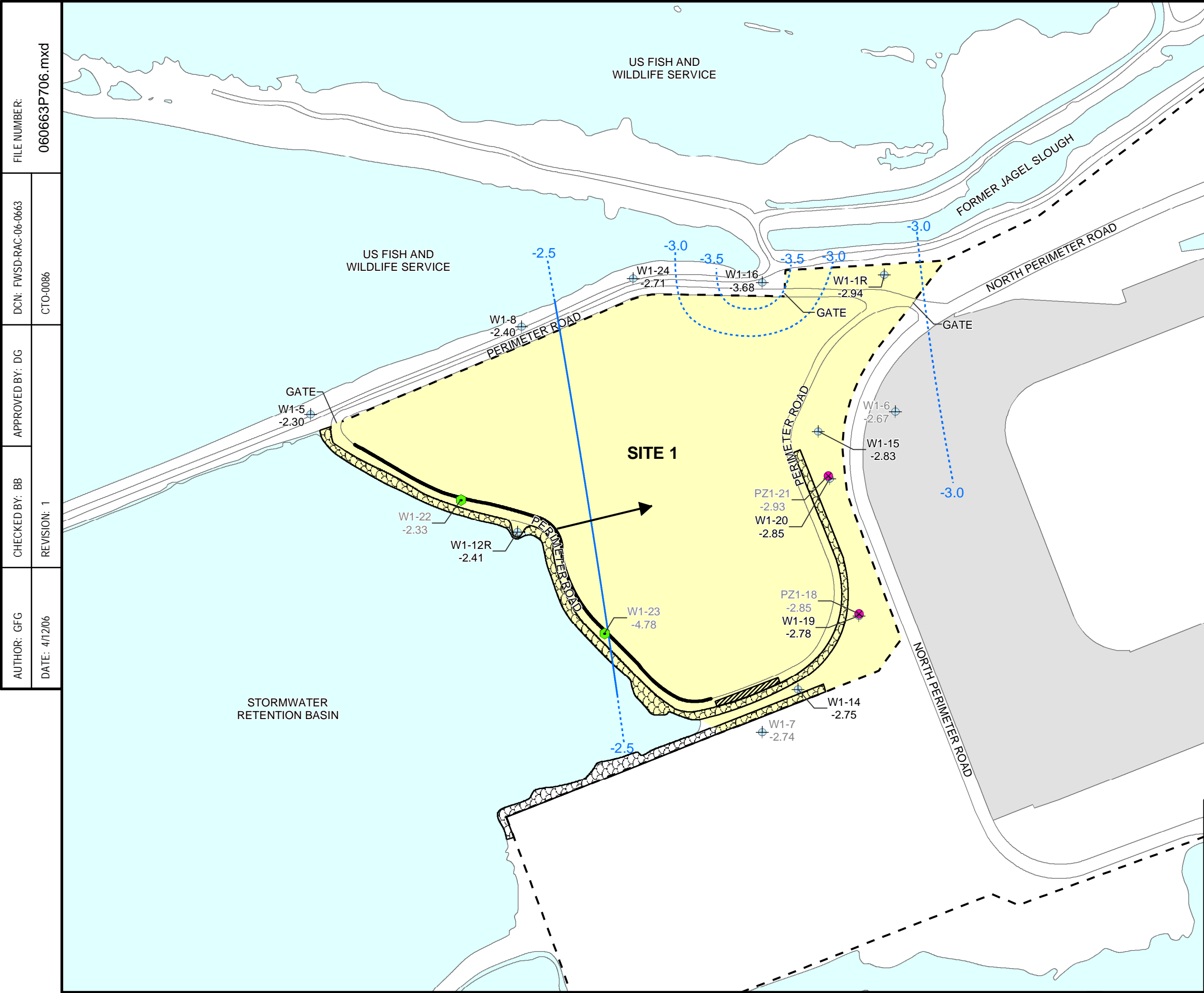
Abbreviations and Acronyms:

ft – feet

msl – mean sea level

NAS – Naval Air Station

ToC – top of casing



LEGEND

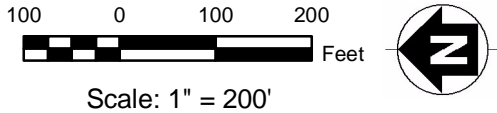
- W1-5
-2.66
- GROUNDWATER MONITORING WELL
GROUNDWATER ELEVATION IN FEET (MSL)
- W1-22
-2.57
- COLLECTION TRENCH WELL
WATER LEVEL NOT USED TO CREATE
POTENTIOMETRIC SURFACE (a)
- PZ1-18
-2.49
- PIEZOMETER
WATER LEVEL NOT USED TO CREATE
POTENTIOMETRIC SURFACE (a)
-
- GENERAL GROUNDWATER FLOW DIRECTION
- 3.0
- INTERPRETED GROUNDWATER ELEVATION
CONTOURED IN FEET (MSL), DASHED WHERE
INFERRED. NEGATIVE VALUES ARE BELOW MSL
- Groundwater Collection Trench
- Road
- Site Security Fence
- Riprap
- Gas Venting Trench
- Runway
- Water/Wetland

NOTES:

GROUNDWATER DEPRESSION AT MONITORING WELL W1-16
MAY BE DUE TO GAUGING WATER LEVEL PRIOR TO
STABILIZATION

MSL - MEAN SEA LEVEL

(a) - WATER LEVEL IN MONITORING WELLS, PIEZOMETERS
AND COLLECTION TRENCH WELLS NOT USED TO
CREATE POTENTIOMETRIC SURFACE ARE NOT
COMPLETED IN THE UPPER MOST PORTION OF THE
SHALLOW AQUIFER



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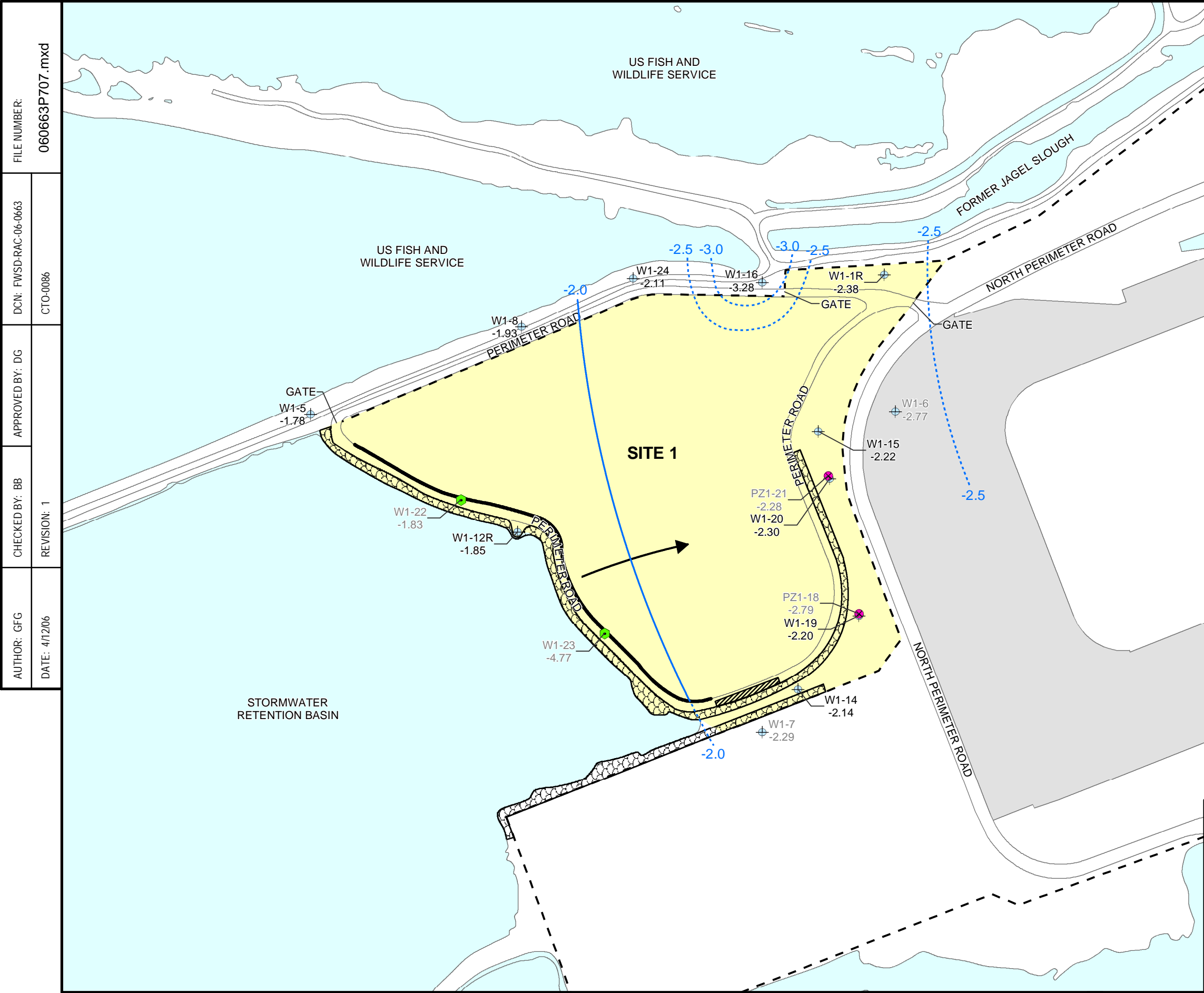
SITE 1 LANDFILL 2005 ANNUAL REPORT

FIGURE 2-2

POTENTIOMETRIC SURFACE, JANUARY 2005

FORMER NAS MOFFETT FIELD
MOFFETT FIELD, CA

TETRA TECH EC, INC.



LEGEND

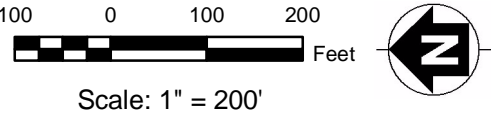
- W1-5 -2.66 GROUNDWATER MONITORING WELL
GROUNDWATER ELEVATION IN FEET (MSL)
- W1-22 -2.57 COLLECTION TRENCH WELL
WATER LEVEL NOT USED TO CREATE
POTENTIOMETRIC SURFACE (a)
- PZ1-18 -2.49 PIEZOMETER
WATER LEVEL NOT USED TO CREATE
POTENTIOMETRIC SURFACE (a)
- GENERAL GROUNDWATER FLOW DIRECTION
- INTERPRETED GROUNDWATER ELEVATION
CONTOURED IN FEET (MSL), DASHED WHERE
INFERRED. NEGATIVE VALUES ARE BELOW MSL
- GROUNDWATER COLLECTION TRENCH
- ROAD
- SITE SECURITY FENCE
- RIPRAP
- GAS VENTING TRENCH
- RUNWAY
- WATER/WETLAND

NOTES:

GROUNDWATER DEPRESSION AT MONITORING WELL W1-16
MAY BE DUE TO GAUGING WATER LEVEL PRIOR TO
STABILIZATION

MSL - MEAN SEA LEVEL

(a) - WATER LEVEL IN MONITORING WELLS, PIEZOMETERS
AND COLLECTION TRENCH WELLS NOT USED TO
CREATE POTENTIOMETRIC SURFACE ARE NOT
COMPLETED IN THE UPPER MOST PORTION OF THE
SHALLOW AQUIFER



BASE REALIGNMENT AND CLOSURE
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SAN DIEGO, CA

SITE 1 LANDFILL 2005 ANNUAL REPORT

FIGURE 2-3

POTENTIOMETRIC SURFACE, MARCH 2005

FORMER NAS MOFFETT FIELD
MOFFETT FIELD, CA

TETRA TECH EC, INC.

- 0.0005 foot per foot (ft/ft) in January 2005
- 0.0005 ft/ft in March 2005
- 0.0005 ft/ft in April 2005
- 0.0007 ft/ft in October 2005

The water levels in monitoring well pair W1-19/PZ1-18 (see Figure D-17 in Appendix D) show upward potential since 1999 (the water levels in PZ1-18 are higher than in W1-19, and PZ1-18 is completed 11 feet deeper in the A aquifer than W1-19), with the exception of measurements collected on August 18, 2004, and January 31 and March 7, 2005. The water levels in monitoring well pair W1-20/PZ1-21 (see Figure D-18 in Appendix D) show upward potential since 1999 (the water levels in PZ1-21 are higher than in W1-20, and PZ1-21 is completed 11 feet deeper in the A aquifer than W1-20), with the exception of measurements collected on July 12, 1999, January 24, 2000, January 16, 2001, and January 31, 2005. Water levels in the W1-20/PZ1-21 pair have been generally within a couple hundredths of a foot of each other since 1999.

2.2 WATER LEVEL TRENDS

Appendix D contains groundwater hydrographs for the 12 monitoring wells and 2 piezometers at the Site 1 Landfill. Some monitoring wells and piezometers show a slight upward (W1-1/1R, W1-12/12R, W1-19, W1-20, PZ1-18, and PZ1-21) or slight downward (W1-16) long-term water level trend, while the remainder of the monitoring wells showed a flat long-term trend. All monitoring wells and piezometers show a seasonal water level variation, with a high-water level elevation near the end of the rainy season (March) and a low-water level elevation near the end of the dry season (October).

The following water level trends were observed in 2005:

- Monitoring wells had seasonal high water levels in March.
- Monitoring wells had seasonal low water levels in October.

The seasonal water level fluctuation was on the order of 1 foot.

3.0 GROUNDWATER SAMPLING

Groundwater monitoring at Site 1 was conducted during 2005 in accordance with the *Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan* (Tetra Tech FW, Inc. [TtFW], 2005a) and the *Final Technical Memorandum, Site 1 Groundwater Evaluation Process* (Tech Memo) (TtFW, 2004).

Groundwater samples were collected from nine monitoring wells, as well as from collection trench well W1-22. Collection trench well W1-23 could not be sampled because of insufficient water. Samples were analyzed for the monitoring parameters (MPs). MPs include physical and analytical parameters. The physical MPs are temperature, conductivity, dissolved oxygen, oxidation/reduction potential, pH, and turbidity. The analytical MPs were selected based on Title 27 California Code of Regulations criteria and are described below (TtFW, 2004). Locations for Site 1 groundwater and collection trench sampling are shown in Figure 3-1. Field sampling data sheets for the April and October 2005 groundwater sampling events are included in Appendix A.

Six supplemental groundwater sampling events were conducted in 2004 and two additional supplemental groundwater sampling events were conducted in January and March 2005 to develop the database required for the Tech Memo evaluation of dissolved mercury and the semivolatile organic compounds (SVOCs). Field sampling data sheets for the supplemental groundwater sampling events are included in Appendix A.

3.1 ANALYTICAL RESULTS

Tables B-1 through B-4 in Appendix B of this document present the analytical summary tables for semiannual and supplemental samples collected in 2005. Appendix C of this document presents the validated analytical data (provided on compact disk [CD] only). Analytical testing for 2005 was conducted in accordance with the Tech Memo (TtFW, 2004), as described in the following section.

3.1.1 Analytical Testing

Groundwater samples collected in April and October 2005 at the Site 1 Landfill were analyzed for the following analytical MPs:

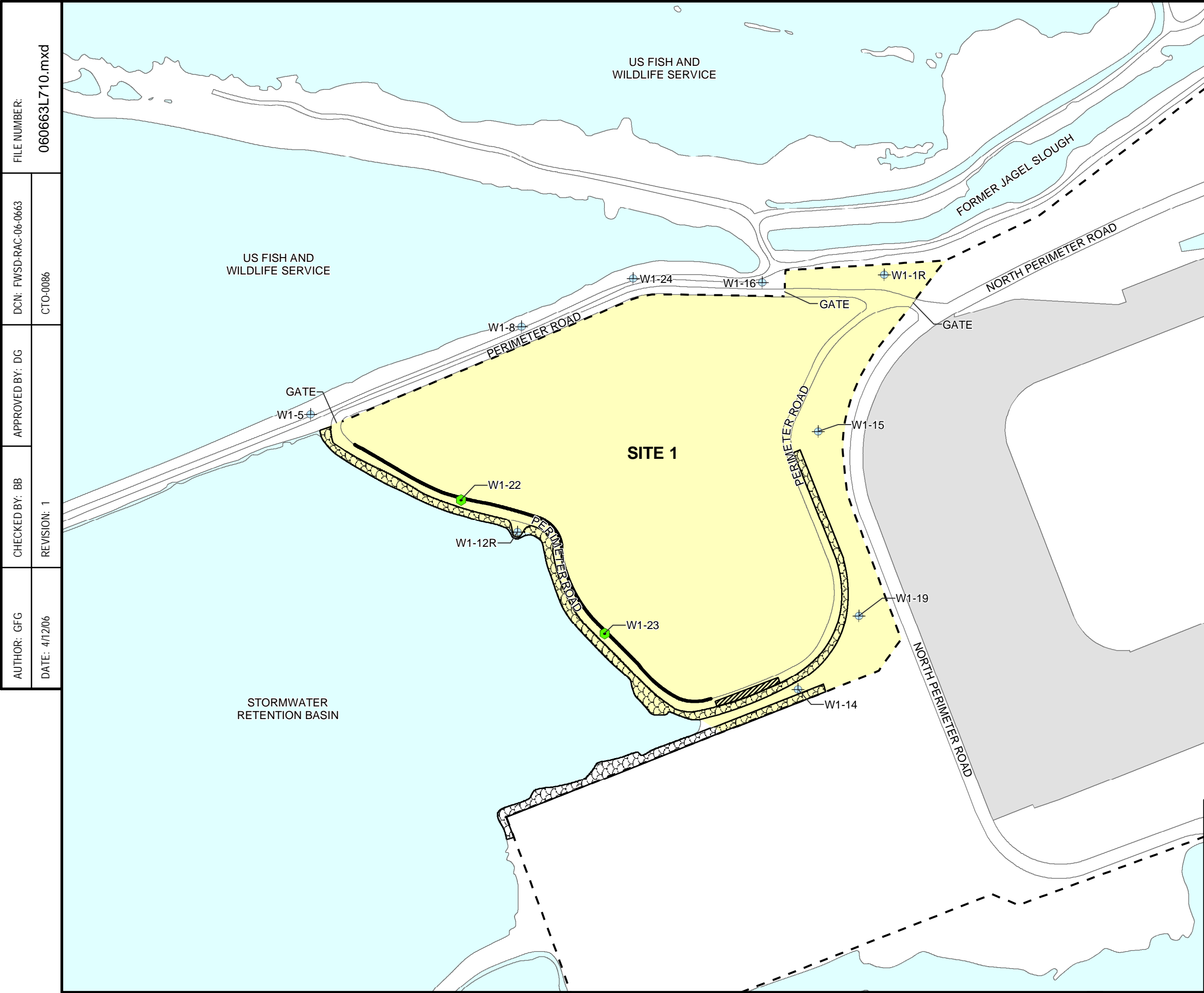
- Volatile organic compounds (VOCs) using United States Environmental Protection Agency (EPA) Method 8260B:
 - M,p-xylene
 - Trichloroethene

- Vinyl chloride
- Pesticides using EPA Method 8081A:
 - Beta-benzene hexachloride
 - Heptachlor
- Dissolved metals using EPA Method 200.8:
 - Arsenic
 - Barium
 - Cobalt
 - Copper
- SVOCs using EPA Method 8270C:
 - 2,4,6-trichlorophenol
 - 2-methylphenol

Supplemental groundwater samples collected in January and March 2005 at the Site 1 Landfill were analyzed for the following:

- Dissolved mercury using EPA Method 7470A
- SVOCs using EPA Method 8270C

Twelve samples, including two duplicate samples, were collected from nine groundwater monitoring wells and one collection trench well at the Site 1 Landfill for each of the semiannual sampling events. Eleven samples, including one duplicate sample, were collected from nine groundwater monitoring wells and one collection trench well at the Site 1 Landfill for each of the supplemental sampling events. The analytical results from the collection trench well W1-22 are not considered representative of chemical concentrations of the shallow aquifer. The collection trench wells were not designed to monitor groundwater at the site. The collection trench wells are screened in a collection trench, located on the north side of the landfill, which was installed to protect the adjacent Stormwater Retention Basin. The collection trench wells are shallow and screened in permeable fill material placed in the collection trench. An impermeable barrier was installed on the north side of the collection trench to inhibit groundwater influence. Because of well construction relative to the collection trench and the shallow aquifer, the collection trench wells are not considered to be useful monitoring points for collecting representative samples of groundwater conditions. However, the collection trench wells are sampled at the same frequency as the monitoring wells in accordance with the *Moffett Federal Airfield Final Operable Unit 1 Record of Decision* (Navy, 1997) requirements.



LEGEND

W1-5 GROUNDWATER MONITORING WELL

W1-22 COLLECTION TRENCH WELL

RIPRAP

GAS VENTING TRENCH

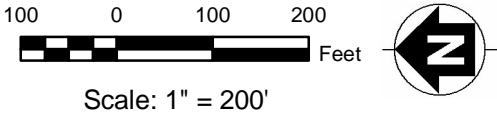
GROUNDWATER COLLECTION TRENCH

ROAD

SITE SECURITY FENCE

RUNWAY

WATER/WETLAND



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SITE 1 LANDFILL 2005 ANNUAL REPORT

FIGURE 3-1

LOCATIONS FOR SITE 1 GROUNDWATER
AND COLLECTION TRENCH SAMPLING

FORMER NAS MOFFETT FIELD
MOFFETT FIELD, CA

TETRA TECH EC, INC.

3.1.2 Statistical Evaluation

Table 3-1 presents the MPs and the calculated concentration limits (CCLs), as detailed in the Tech Memo (TiFW, 2004). CCLs were developed based on ecological screening criteria and site-specific attenuation factors for the groundwater. These CCLs are used as initial screening criteria in the groundwater data evaluation. If analytical results are less than the CCLs, then no additional evaluation is required, and there is no release from the landfill. If CCLs are exceeded, then additional evaluation of the upgradient (background) and downgradient data is conducted to determine whether there has been a release from the landfill. If upgradient concentrations are higher than downgradient concentrations, there is no release from the landfill. Conversely, if downgradient concentrations are higher than upgradient concentrations, additional sampling events are conducted and evaluated to determine whether there has been a release from the landfill. Tables 3-2 and 3-3 present the physical MPs and MP analytes detected in groundwater samples from monitoring wells and the collection trench at Site 1 during April and October 2005 sampling events. Tables B-5 and B-6 provide the statistical evaluation summary.

3.1.3 Visual Trends

Appendix E contains groundwater monitoring point data graphs for monitoring wells with at least one detection in 2005, and a total of at least three historical detected concentrations (1999 through 2005). Groundwater monitoring point data graphs are specified in Title 27 California Code of Regulations, Section 20415(e)(14). Trends were determined by visually evaluating the graphs for increasing concentration trends, decreasing concentration trends, or relatively consistent (flat) concentration trends.

Arsenic, barium, cobalt, and copper were all detected at least once in 2005, and each dissolved metal had at least three historical detected concentrations (1999 through 2005) in samples from every Site 1 groundwater monitoring well. In general, arsenic concentrations show a decreasing trend, barium concentrations show a flat trend, cobalt concentrations show a flat to decreasing trend, and copper concentrations show a decreasing trend. All of these metals are found in seawater (Hem, 1971) and are considered part of the composition of natural groundwater at the Site 1 Landfill.

No VOCs, SVOCs, or pesticides were detected in 2005 with a total of at least three historically detected concentrations (1999 through 2005) in samples from a Site 1 groundwater monitoring well. Therefore, no other trends exist.

3.2 GROUNDWATER QUALITY EVALUATION

Results from the 2005 groundwater sampling events are tabulated in Appendix B of this document and summarized below.

3.2.1 April 2005 Sampling Event

During the April 2005 sampling event, the dissolved metal MPs (arsenic, barium, cobalt, and copper) and one pesticide MP (heptachlor) were detected in samples from monitoring wells at concentrations greater than their respective project reporting limits (see Table 3-2). Neither VOC nor SVOC MPs were detected in the April 2005 sampling event. The following details how barium and heptachlor exceeded their respective CCLs:

- The barium CCL was exceeded in samples from every monitoring well. However, all CCL exceedances either occurred in samples from a background well or were less than historical background values, and thus were removed from further consideration.
- Heptachlor was detected in a sample from background monitoring well W1-5. Since the heptachlor CCL was exceeded in a sample from a background well, it was removed from further consideration.

Also during the April 2005 sampling event, the dissolved metal MPs were detected in a sample from trench well W1-22 at concentrations greater than their respective project reporting limits (see Table 3-2). However, the analytical results from the collection trench well are not considered representative of chemical concentrations of the shallow aquifer (see Section 3.1.1).

3.2.2 October 2005 Sampling Event

During the October 2005 sampling event, the dissolved metal MPs (arsenic, barium, cobalt, and copper) and one pesticide MP (heptachlor) were detected in samples from monitoring wells at concentrations greater than their respective project reporting limits (see Table 3-3). No VOC or SVOC MP was detected in the October 2005 sampling event. The following details how barium exceeded its CCL:

- The barium CCL was exceeded in samples from every monitoring well. Barium occurred in samples from a background well or was below historical background values. Thus, it was removed from further consideration.

Also during the October 2005 sampling event, the dissolved metal MPs and one pesticide MP (beta-benzene hexachloride) were detected in samples from trench well W1-22 at concentrations greater than their respective project reporting limits (see Table 3-3). However, the analytical results from the collection trench well are not considered representative of chemical concentrations of the shallow aquifer (see Section 3.1.1).

3.2.3 Supplemental Sampling Events

There were no detections of dissolved mercury or of any SVOC greater than the project reporting limit for the supplemental groundwater samples collected in January and March 2005 (see Tables B-3 and B-4 of Appendix B).

TABLE 3-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
MONITORING PARAMETERS AND CALCULATED CONCENTRATION LIMITS
FORMER NAS MOFFETT FIELD**

| MP | MDL ^a (µg/L) | SQL ^a (µg/L) | Calculated Concentration Limit (µg/L) |
|-----------------------|----------------------------|----------------------------|--|
| Metals | | | |
| Arsenic | 0.22 | 1 | 89.64 |
| Barium | 0.18 | 10 | 40.00 |
| Cobalt | 0.2 | 1 | 230.00 |
| Copper | 0.19 | 1 | 5.15 |
| VOCs | | | |
| m,p-Xylene | 0.3 | 1 | 4.11 |
| Trichloroethene | 0.2 | 0.5 | 9.49 |
| Vinyl chloride | 0.2 | 1 | 61.95 |
| Pesticides | | | |
| beta-BHC | 0.01 | 0.05 | 340.00 |
| Heptachlor | 0.01 | 0.05 | 0.36 |
| SVOCs | | | |
| 2,4,6-Trichlorophenol | 5 | 10 | 411.28 |
| 2-Methylphenol | 5 | 10 | 11.31 |

Note:

^a The MDL and SQL are based on the specific analytical methods listed in Section 4.1 of the *Technical Memorandum, Site 1 Groundwater Evaluation Process* (TtFW, 2004). MDLs are likely to change slightly for each analysis, as the MDL depends on both sample and instrument conditions at the time of analysis. For those cases where the CCLs have been made equal to the MDL, the CCL may change slightly for each analysis event.

Abbreviations and Acronyms:

µg/L – micrograms per liter
 BHC – benzene hexachloride
 CCL - calculated concentration limit
 MP – monitoring parameter
 MDL – method detection limit
 NAS – Naval Air Station
 SQL – sample quantitation limit
 SVOC – semivolatile organic compound
 TtFW – Tetra Tech FW, Inc.
 VOC – volatile organic compound

TABLE 3-2

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
APRIL 2005 DETECTED ANALYTES IN GROUNDWATER
FORMER NAS MOFFETT FIELD**

| MP | 86-S1-108 W1-1R 4/11/05 | 86-S1-109 W1-15 4/11/05 | 86-S1-110 W1-19 4/11/05 | 86-S1-112 W1-14 4/11/05 | 86-S1-113 W1-12R 4/12/05 | 86-S1-114 W1-12R (DUP) 4/12/05 | 86-S1-115 W1-22 ^a 4/12/05 | 86-S1-116 W1-5 4/12/05 | 86-S1-117 W1-8 4/12/05 | 86-S1-118 W1-8 (DUP) 4/12/05 | 86-S1-119 W1-24 4/13/05 | 86-S1-120 W1-16 4/13/05 |
|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------------|--|------------------------------|------------------------------|------------------------------------|-------------------------------|-------------------------------|
| Dissolved Metals (µg/L) | EPA Method 200.8 | | | | | | | | | | | |
| Arsenic | 0.834 J | 4.61 J | 2.2 J | 4.54 J | 1.55 J | 1.63 J | 2.76 J | 1.05 J | 2.09 J | 1.77 J | 6.35 J | 5.43 J |
| Barium | 73.3 | 145 J | 83.8 | 184 | 74.3 | 73.4 J | 208 | 507 | 130 | 130 J | 218 | 244 |
| Cobalt | 13.5 | 1.91 J | 9.93 | 6.01 | 4.67 | 6.37 | 4.33 | 1.28 | 2.74 | 2.4 J | 6.29 | 4.99 |
| Copper | 0.602 J | 0.205 J | 0.814 J | 0.225 J | 0.528 J | 0.573 J | 0.831 J | 0.142 J | 0.329 J | 0.434 J | 0.243 J | 0.214 J |
| Pesticides (µg/L) | EPA Method 8081A | | | | | | | | | | | |
| Heptachlor | 0.047 U | 0.048 U | 0.047 U | 0.047 U | 0.053 U | 0.047 U | 0.047 U | 1.2 | 0.048 U | 0.047 U | 0.048 U | 0.048 U |
| Field Measurements | | | | | | | | | | | | |
| DO (mg/L) | 0.09 | 0.04 | 0.05 | 0.1 | 0.14 | - | 0.09 | 0.1 | 0.09 | - | 0.15 | 0.11 |
| pH | 6.8 | 6.9 | 6.9 | 7 | 7.1 | - | 7 | 7.1 | 7.3 | - | 7.1 | 6.9 |
| ORP (mV) | 316 | 37 | 186 | 104 | 242 | - | 100 | 96 | 256 | - | -97 | -123 |
| Temperature (°C) | 22.8 | 24.5 | 22.8 | 21.2 | 13.9 | - | 22.6 | 24.1 | 21.8 | - | 16.4 | 18.6 |
| Conductivity (µmhos/cm) | 86170 | 60919 | 85611 | 80166 | 49547 | - | 27540 | 72228 | 76714 | - | 54692 | 60787 |
| Turbidity (NTU) | 0.75 | 6.4 | 1.3 | 2.9 | 12 | - | 2.2 | 5.9 | 1.9 | - | 5.8 | 3.2 |

Notes:

^a – Well W1-22 is a collection trench well not representative of groundwater at Site 1.

Shading indicates concentration above the calculated concentration limit.

Abbreviations and Acronyms:

µg/L – micrograms per liter

µmhos/cm – micromhos per centimeter

°C – degrees Celsius

DO – dissolved oxygen

DUP – duplicate sample

EPA – United States Environmental Protection Agency

J – estimated value

mg/L – milligrams per liter

MP – monitoring parameter

mV – millivolts

NAS – Naval Air Station

NTU – nephelometric turbidity unit

ORP – oxidation/reduction potential

pH – hydrogen (ion) concentration

U – analyte not detected above project reporting limit

TABLE 3-3

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
OCTOBER 2005 DETECTED ANALYTES IN GROUNDWATER
FORMER NAS MOFFETT FIELD**

| MP | 86-S1-124 W1-1R 10/4/05 | 86-S1-125 W1-15 10/4/05 | 86-S1-126 W1-19 10/6/05 | 86-S1-128 W1-14 10/6/05 | 86-S1-129 W1-12R 10/6/05 | 86-S1-130 W1-22 ^a 10/6/05 | 86-S1-131 W1-5 10/6/05 | 86-S1-132 W1-5 (DUP) 10/6/05 | 86-S1-133 W1-8 10/6/05 | 86-S1-134 W1-8 (DUP) 10/6/05 | 86-S1-135 W1-24 10/6/05 | 86-S1-136 W1-16 10/6/05 |
|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--|------------------------------|------------------------------------|------------------------------|------------------------------------|-------------------------------|-------------------------------|
| Dissolved Metals (µg/L) | EPA Method 200.8 | | | | | | | | | | | |
| Arsenic | 1.61 | 4.47 | 2.97 | 5.28 | 2.53 | 1.93 | 0.95 | 1.95 J | 3.86 | 4.33 J | 7.25 | 7.72 |
| Barium | 107 | 176 | 99.9 | 159 | 72 | 1260 | 576 | 556 J | 150 | 150 J | 398 | 458 |
| Cobalt | 7.69 J | 3.32 J | 9.69 J | 8.34 J | 5.25 J | 0.36 J | 1.73 J | 2.99 J | 2.27 J | 2.28 J | 2.87 J | 7.28 J |
| Copper | 2.64 J | 0.1 J | 0.494 J | 0.075 J | 0.205 J | 0.135 J | 0.031 J | 0.06 J | 0.099 J | 0.093 J | 0.14 J | 0.125 J |
| Pesticides (µg/L) | EPA Method 8081A | | | | | | | | | | | |
| beta-BHC | 0.048 U | 0.048 U | 0.047 U | 0.047 U | 0.049 U | 0.25 | 0.05 U | 0.048 U | 0.048 U | 0.047 U | 0.05 U | 0.049 U |
| Heptachlor | 0.048 U | 0.048 U | 0.047 U | 0.047 U | 0.02 J | 0.049 U | 0.05 U | 0.048 U | 0.048 U | 0.047 U | 0.05 U | 0.049 U |
| Field Measurements | | | | | | | | | | | | |
| DO (mg/L) | 0.2 | 0.26 | 0.26 | 0.23 | 0.13 | 0.1 | 0.11 | - | 0.11 | - | 0.2 | 0.11 |
| pH | 6.5 | 6.7 | 6.6 | 6.7 | 6.5 | 6.3 | 6.5 | - | 6.7 | - | 6.5 | 6.5 |
| ORP (mV) | 316 | -32 | 185 | 74 | 164 | 37 | 63 | - | 59 | - | 8 | 17 |
| Temperature (°C) | 20.6 | 21.2 | 15.6 | 18.3 | 19.9 | 23.4 | 23.2 | - | 22.8 | - | 20.5 | 21 |
| Conductivity (µmhos/cm) | 69802 | 64824 | 68499 | 67110 | 68690 | 43570 | 57874 | - | 60648 | - | 60221 | 64722 |
| Turbidity (NTU) | 0 | 6.4 | 1.8 | 2.6 | 21.2 | 15 | 2.6 | - | 8.9 | - | 6.3 | 14.1 |

Notes:

^a – Well W1-22 is a collection trench well not representative of groundwater at Site 1.

Shading indicates concentration above the calculated concentration limit.

Abbreviations and Acronyms:

µg/L – micrograms per liter

µmhos/cm – micromhos per centimeter

°C – degrees Celsius

BHC – benzene hexachloride

DO – dissolved oxygen

DUP – duplicate sample

EPA – United States Environmental Protection Agency

J – estimated value

mg/L – milligrams per liter

MP – monitoring parameter

mV – millivolts

NAS – Naval Air Station

NTU – nephelometric turbidity unit

ORP – oxidation/reduction potential

pH – hydrogen (ion) concentration

U – analyte not detected above project reporting limit

4.0 METHANE MONITORING

As part of landfill monitoring activities, methane monitoring was conducted for 19 passive gas vent (GV) wells within the Site 1 Landfill and 4 landfill gas monitoring wells (LGMW) on the perimeter of the landfill. Methane monitoring was also performed at the perimeter of the site at 150-foot intervals at 21 locations. The monitoring program was conducted in accordance with Section 4 of the *Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan* (Tetra Tech FW, Inc., 2005a). The monitoring program was conducted in April and October 2005, using a Landtec GA 90 portable methane monitor. Methane monitoring locations are shown in Figure 4-1.

4.1 LANDFILL GAS MONITORING WELL AND GAS VENT RESULTS

The results of LGMW and GV monitoring are shown in Table 4-1. In general, the percentages of methane gas concentrations within the landfill were slightly lower in October 2005 than in April 2005, and are similar to historical concentrations. Methane concentrations were highest in April 2005, near the northern portion of the landfill (GV-7 at 42.3 percent), followed by a detected concentration of 36.0 percent in GV-11, which is near the center of the landfill. None of the perimeter wells (LGMW1-1 through LGMW1-4) showed concentrations of methane above the concentration limit of 5 percent (all readings were zero percent), as specified in Title 27 California Code of Regulations, Section 20921(a)(2) and as identified in the *Moffett Federal Airfield Final Operable Unit 1 Record of Decision* (Department of the Navy, 1997). Appendix F contains methane monitoring data graphs for the 19 GV wells and the 4 LGMWs.

4.2 PERIMETER GAS MONITORING RESULTS

Perimeter monitoring points (P-1 through P-21) are located along the perimeter fence line at approximate 150-foot intervals. Methane was not detected at any of the perimeter monitoring locations in April or October 2005.

TABLE 4-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
2005 LANDFILL GAS MONITORING WELL AND
GAS VENT METHANE MONITORING RESULTS
FORMER NAS MOFFETT FIELD**

| Monitoring Location | Percent Methane ¹ | |
|---------------------|------------------------------|-----------------|
| | April 18, 2005 | October 7, 2005 |
| GV-1 | 0.5 | 0.1 |
| GV-2 | 0.0 | 0.0 |
| GV-3 | 0.0 | 0.0 |
| GV-4 | 0.0 | 0.0 |
| GV-5 | 0.0 | 4.8 |
| GV-6 | 23.0 | 2.6 |
| GV-7 | 42.3 | 38.6 |
| GV-8 | 32.1 | 24.8 |
| GV-9 | 0.0 | 0.0 |
| GV-10 | 1.4 | 1.0 |
| GV-11 | 36.0 | 3.5 |
| GV-12 | 12.9 | 0.0 |
| GV-13 | 0.0 | 0.0 |
| GV-14 | 0.0 | 0.0 |
| GV-15 | 0.0 | 0.0 |
| GV-16 | 0.0 | 0.0 |
| GV-17 | 0.0 | 0.0 |
| GV-18 | 0.0 | 0.0 |
| GV-19 | 0.0 | 0.0 |
| LGMW1-1 | 0.0 | 0.0 |
| LGMW1-2 | 0.0 | 0.0 |
| LGMW1-3 | 0.0 | 0.0 |
| LGMW1-4 | 0.0 | 0.0 |

Notes:

¹ - Methane concentrations were measured using a Landtec GA 90 portable methane meter. Accuracy is $\pm 0.3\%$ by volume at 5% concentration, and $\pm 1.9\%$ by volume at 60% concentration.

Abbreviations and Acronyms:

GV – gas vent

LGMW – landfill gas monitoring well

NAS - Naval Air Station

5.0 CONCLUSIONS

Depth-to-groundwater measurements were collected from Site 1 Landfill monitoring wells, piezometers, and collection trench wells on:

- January 31, 2005
- March 7, 2005
- April 11, 2005
- October 3, 2005

Groundwater elevations for all Site 1 Landfill measurements were below sea level for 2005. In general, the groundwater elevations were similar to previous years. The groundwater flows from north to south at the Site 1 Landfill. The gradient from north to south was approximately:

- 0.0005 foot per foot (ft/ft) in January 2005
- 0.0005 ft/ft in March 2005
- 0.0005 ft/ft in April 2005
- 0.0007 ft/ft in October 2005

The following water level trends were observed in 2005:

- Monitoring wells had seasonal high water levels in March.
- Monitoring wells had seasonal low water levels in October.

The seasonal water level fluctuation was on the order of approximately 1 foot.

The water levels in monitoring well pairs W1-19/PZ1-18 and W1-20/PZ1-21 generally show upward potential since 1999.

Dissolved metal monitoring parameters (MPs) were detected at least once in 2005. Historically detected concentrations since 1999 generally show a decreasing trend for arsenic, a flat trend for barium, a flat to decreasing trend for cobalt, and a decreasing for copper. All of these metals are found in seawater (Hem, 1971) and are considered part of the composition of natural groundwater at the Site 1 Landfill.

No volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), or pesticides were detected in 2005 with a total of at least three historically detected concentrations (1999 through 2005) in samples from a Site 1 groundwater monitoring well. Therefore, no other trends exist.

During the April 2005 sampling event, the dissolved metal MPs and one pesticide MP (heptachlor) were detected in samples from monitoring wells at concentrations greater than their respective project reporting limits. Only concentrations of barium and heptachlor exceeded their respective calculated concentrations limits (CCLs). Barium was removed from further consideration due to the CCL exceedances occurring in samples from a background well or exceedances were less than historical background values. Heptachlor was also removed from further consideration due the CCL exceedance occurring in a sample from a background well. Neither VOC nor SVOC MPs were detected in the April 2005 sampling event.

During the October 2005 sampling event, the dissolved metal MPs and one pesticide MP (heptachlor) were detected at concentrations greater than their respective project reporting limits. Only concentrations of barium exceeded its CCL. Barium was removed from further consideration due to the CCL exceedances occurring in samples from a background well or exceedances were less than historical background values. Neither VOC nor SVOC MPs were detected in the October 2005 sampling event.

There were no detections of dissolved mercury or of any SVOC at concentrations greater than the project reporting limit for the supplemental groundwater samples collected in January and March 2005.

Analytical results obtained throughout 2005 indicate that there has not been a release from the landfill to groundwater.

As part of landfill monitoring activities, methane monitoring was conducted at the Site 1 Landfill. In general, the percentages of methane gas concentrations within the landfill were slightly lower in October 2005 than in April 2005 and were similar to historical concentrations. Methane was not detected at any of the perimeter monitoring locations in April or October 2005. No landfill gas is migrating off site.

As part of landfill maintenance activities, the landfill is routinely inspected and repaired, as necessary. The landfill cover is intact and functional.

6.0 REFERENCES

- Department of the Navy. 1997. *Moffett Federal Airfield Final Operable Unit 1 Record of Decision*. Moffett Federal Airfield, Moffett Field, California. August 1.
- Freeze, R.A., and J.A. Cherry. 1979. *Groundwater*. Prentice-Hall, Inc.: Englewood Cliffs, New Jersey.
- Hem, John D. 1971. *Study and Interpretation of the Chemical Characteristics of Natural Water*. Geological Survey Water-Supply Paper 1473. Second Edition.
- International Technology Corporation. 1993. *Remedial Investigation Report, Operable Unit 1, Landfill Sites 1 and 2*. NAS Moffett Field. March.
- Tetra Tech EM, Inc. 2000. *Draft Northern Channel Physical Characterization Report*. February.
- Tetra Tech FW, Inc. (TtFW). 2004. *Final Technical Memorandum, Site 1 Groundwater Evaluation Process*. April 8.
- _____. 2005a. *Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan*. March 18.
- _____. 2005b. *Final Site 1 Landfill Post-Closure Long-Term Maintenance Plan*. March 18.

APPENDIX A

FIELD SAMPLING DATA

SEMIANNUAL SAMPLING

APRIL 2005

Date 04-11-05

| | | | |
|--------------------|-------------------------|--------------------------------------|---|
| Well Name | W1-1R | Screen Interval | 14.3 - 24.3 |
| Project | Site 1 gw (semi-annual) | Station Elevation | GND TOC Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project No. | 1990.086E | Static Water Level (from TOC) / Time | 7.50/0823 7.50/0824 7.51/0825 |
| Well Location | Site 1 | Average Water Level (from TOC) | 7.50 |
| Sample Date | 04-11-05 | Reference Point | TOC PID Readings (background) 0 |
| Sampling Personnel | Ogle | Reference Elevation | PID Reading (TOC) 0 |
| | Ramos | Static Elevation | Notes |
| | | Well Depth MEAS | 27.46 RPTD Feet of Water |
| Sample ID | 86-S1-108 | Depth of Bottom of Tubing | 19.3 |
| Duplicate ID | | Depth to Water (w/ Tubing in Well) | 7.48 |

PURGING

[illegible]

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot.

SAMPLE PARAMETERS

| | | | | | | | |
|------|-------|------|------------|-------------|--------------|--|--|
| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| | | | | | | | |
|--------|--------|--------|--------|--------|--------|--|--|
| 1L/min | 4L/min | 4L/min | 4L/min | 4L/min | 4L/min | | |
|--------|--------|--------|--------|--------|--------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good

Remarks: samples effervesced in voas

FIELD EQUIPMENT

| | | | | | |
|-------------------------|------------------|---------------|---------|-------------------------------|---|
| pH Meter | Hydrolab | Serial Number | #R41906 | Number of Bottles | 3X40ml, 6X1L amber, |
| Temperature Meter | Hydrolab | Serial Number | #R41906 | | 1X1L Poly, 1X250ml poly |
| Turbidity Meter | Lamotte | Serial Number | | | |
| Spec. Elec. Cond. Meter | Hydrolab | Serial Number | #R41906 | Field Notebook | |
| ORP Meter | Hydrolab | Serial Number | #R41906 | | |
| D.O. Meter | Hydrolab | Serial Number | #R41906 | Sample Method | Low Flow |
| Interface Probe | Solinst | Serial Number | #27582 | | |
| PID/OVA | Mini-Rae | Serial Number | #00320 | | |
| Pump | Geo-Pump | Serial Number | BA0041 | | |
| Filter Apparatus | Geo - .45 Micron | | | Discharge Water Containerized | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | | |
|--|---|--|---|
| Well Name <u>W1-5</u> | Screen Interval <u>14.5-19.5</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>Site 1 gw (semi-annual)</u> | Static Water Level (from TOC) / Time <u>5.11/1325</u> <u>5.13/1326</u> <u>5.13/1327</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.12</u> | | |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Sample Date <u>04-12-05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sampling Personnel <u>Ogle</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>Ramos</u> | Well Depth MEAS <u>21.30</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-116</u> | Depth of Bottom of Tubing <u>17.0</u> | | |
| Duplicate ID <u> </u> | Depth to Water (w/ Tubing in Well) <u>5.10</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1400 | .4 | .43 | 7.2 | 274 | 25.8 | 72408 | 8.2 | .25 | | | 5.0 | |
| 1403 | .4 | .20 | 7.2 | 174 | 24.9 | 71223 | 5.6 | .55 | | | 5.1 | |
| 1406 | .4 | .18 | 7.2 | 137 | 24.5 | 71686 | 3.7 | .8 | | | 5.1 | |
| 1409 | .4 | .16 | 7.2 | 128 | 24.4 | 71644 | 3.6 | 1.05 | | | 5.1 | |
| 1412 | .4 | .10 | 7.2 | 113 | 24.4 | 71988 | 3.7 | 1.3 | | | 5.2 | |
| 1415 | .4 | .12 | 7.2 | 101 | 24.3 | 72124 | 3.8 | 1.55 | | | 5.2 | |
| 1418 | .4 | .10 | 7.1 | 98 | 24.1 | 72128 | 6.0 | 1.8 | | | 5.3 | |
| 1421 | .4 | .10 | 7.1 | 97 | 24.0 | 72298 | 5.9 | 2.0 | | | 5.3 | |
| 1424 | .4 | .10 | 7.1 | 96 | 24.1 | 72238 | 5.9 | 2.3 | | | 5.3 | |
| 1427 | WELL STABLE - SAMPLING | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | |
|------|-------|------|------------|-------------|--------------|--|--|
| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| | | | | | | | |
|---------|---------|---------|---------|---------|---------|--|--|
| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Slight turbidity throughout sampling - VOC samples effervesced.

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Number of Bottles <u>3X40ml, 6X1L amber,</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | <u>1X1L Poly, 1X250ml poly</u> |
| Turbidity Meter <u>Lamotte</u> | Serial Number <u> </u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Field Notebook <u> </u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>#27582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>#00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>8A0041</u> | |
| Filter Apparatus <u>Geo - .45 Micron</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | | |
|--|---|--|---|
| Well Name <u>W1-8</u> | Screen Interval <u>13 - 18</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>Site 1 gw (semi-annual)</u> | Static Water Level (from TOC) / Time <u>5.05/1435</u> <u>5.04/1436</u> <u>5.05/1437</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.05</u> | | |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Sample Date <u>04-12-05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sampling Personnel <u>Ogle</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>Ramos</u> | Well Depth MEAS <u>22.78</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-117</u> | Depth of Bottom of Tubing <u>15.5</u> | | |
| Duplicate ID <u>86-S1-118</u> | Depth to Water (w/ Tubing in Well) <u>5.00</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1540 | .4 | .46 | 7.4 | 287 | 21.7 | 76730 | 3.0 | .25 | | | 5.01 | |
| 1543 | .4 | .21 | 7.4 | 280 | 21.7 | 76720 | 3.2 | .5 | | | 5.01 | |
| 1546 | .4 | .20 | 7.4 | 271 | 21.8 | 76724 | 3.1 | .8 | | | 5.10 | |
| 1549 | .4 | .10 | 7.3 | 260 | 21.8 | 76728 | 1.9 | 1.1 | | | 5.10 | |
| 1552 | .4 | .10 | 7.3 | 257 | 21.8 | 76715 | 2.1 | 1.3 | | | 5.10 | |
| 1555 | .4 | .09 | 7.3 | 256 | 21.8 | 76714 | 1.9 | 1.5 | | | 5.00 | |
| 1558 | WELL STABLE - SAMPLING | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | |
|------|-------|------|------------|-------------|--------------|--|--|
| VOCs | SVOCS | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| | | | | | | | |
|---------|---------|---------|---------|---------|---------|--|--|
| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Slight green color - Slight H2S odor. VOC samples effervesced.

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Number of Bottles <u>3X40ml, 6X1L amber,</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | <u>1X1L Poly, 1X250ml poly</u> |
| Turbidity Meter <u>Lamotte</u> | Serial Number <u> </u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Field Notebook <u> </u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>#27582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>#00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>Geo - .45 Micron</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | | | |
|--|---|------------------------------------|-----------------------------|---|
| Well Name <u>W1-12R</u> | Screen Interval <u>15-25</u> | Station Elevation <u>GND</u> | TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>Site 1 gw (semi-annual)</u> | Static Water Level (from TOC) / Time <u>2.29/0800</u> | <u>2.30/0801</u> | <u>2.33/0802</u> | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>2.31</u> | | | |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | | |
| Sample Date <u>04-12-05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | | |
| Sampling Personnel <u>Ogle</u> | Static Elevation <u> </u> | Notes <u> </u> | | |
| <u>Ramos</u> | Well Depth MEAS <u>25.78</u> | RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-113</u> | Depth of Bottom of Tubing <u>20</u> | | | |
| Duplicate ID <u>86-S1-114</u> | Depth to Water (w/ Tubing in Well) <u>2.30</u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | EH/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|----------------------------------|----------|
| 0828 | .4 | .60 | 7.1 | 354 | 12.8 | 58818 | 38 | .25 | | 2.32 | |
| 0831 | .4 | .36 | 7.1 | 326 | 12.8 | 56006 | 30 | .50 | | 2.34 | |
| 0834 | .4 | .25 | 7.1 | 308 | 12.8 | 54424 | 22 | .80 | | 2.34 | |
| 0837 | .4 | .23 | 7.1 | 289 | 13.0 | 54004 | 20 | 1.0 | | 2.34 | |
| 0840 | .4 | .21 | 7.2 | 275 | 13.0 | 53440 | 18 | 1.25 | | 2.33 | |
| 0843 | .4 | .19 | 7.1 | 261 | 13.4 | 51592 | 15 | 1.5 | | 2.34 | |
| 0846 | .4 | .17 | 7.1 | 253 | 13.6 | 50669 | 16 | 1.75 | | 2.34 | |
| 0849 | .4 | .15 | 7.1 | 246 | 13.8 | 49972 | 12 | 2.0 | | 2.34 | |
| 0852 | .4 | .15 | 7.1 | 244 | 13.9 | 49861 | 12 | 2.3 | | 2.33 | |
| 0855 | .4 | .14 | 7.1 | 242 | 13.9 | 49547 | 12 | 2.5 | | 2.32 | |
| 0858 | WELL STABLE - SAMPLING | | | | | | | | | | |

Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Slight turbidity - slight H2S odor - samples effervesced in voas

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Number of Bottles <u>3X40ml, 6X1L amber,</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | <u>1X1L Poly, 1X250ml poly</u> |
| Turbidity Meter <u>Lamotte</u> | Serial Number <u> </u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Field Notebook <u> </u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>#27582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>#00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>Geo - .45 Micron</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Date 04-11-05

| | | |
|--|---|---|
| Well Name <u>W1-14</u> | Screen Interval <u>4.1-14.1</u> | |
| Project <u>Site 1 gw (semi-annual)</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project No. <u>1990.086E</u> | Static Water Level (from TOC) / Time <u>4.80/1455</u> <u>4.81/1456</u> <u>4.83/1457</u> | |
| Well Location <u>Site 1</u> | Average Water Level (from TOC) <u>4.81</u> | |
| Sample Date <u>04-11-05</u> | Reference Point <u> </u> TOC <u> </u> | PID Readings (background) <u>0</u> |
| Sampling Personnel <u>Ogle</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> |
| <u>Ramos</u> | Static Elevation <u> </u> | Notes <u> </u> |
| | Well Depth MEAS <u>17.7</u> RPTD <u> </u> | Feet of Water <u> </u> |
| Sample ID <u>86-S1-112</u> | Depth of Bottom of Tubing <u>9.1</u> | |
| Duplicate ID <u> </u> | Depth to Water (w/ Tubing in Well) <u>4.80</u> | |

PURGING

[illegible]

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | |
|------|-------|------|------------|-------------|--------------|--|--|
| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| | | | | | | | |
|---------|---------|---------|---------|---------|---------|--|--|
| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good

Remarks: Slight turbidity - samples effervesced in voas

FIELD EQUIPMENT

| | | | | | |
|-------------------------|------------------|---------------|---------|-------------------------------|---|
| pH Meter | Hydrolab | Serial Number | #R41906 | Number of Bottles | 3X40ml, 6X1L amber, _____ |
| Temperature Meter | Hydrolab | Serial Number | #R41906 | | 1X1L Poly, 1X250ml poly |
| Turbidity Meter | Lamotte | Serial Number | _____ | | _____ |
| Spec. Elec. Cond. Meter | Hydrolab | Serial Number | #R41906 | Field Notebook | _____ |
| ORP Meter | Hydrolab | Serial Number | #R41906 | | _____ |
| D.O. Meter | Hydrolab | Serial Number | #R41906 | Sample Method | Low Flow |
| Interface Probe | Solinst | Serial Number | #27582 | | _____ |
| PID/OVA | Mini-Rae | Serial Number | #00320 | | _____ |
| Pump | Geo-Pump | Serial Number | BA0041 | | _____ |
| Filter Apparatus | Geo - .45 Micron | | | Discharge Water Containerized | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Page 1 of 1Date 04-11-05

| | | | |
|--|---|--|---|
| Well Name <u>W1-15</u> | Screen Interval <u>4.4 - 14.4</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>Site 1 gw (semi-annual)</u> | Static Water Level (from TOC) / Time <u>5.13/0954</u> <u>5.14/0955</u> <u>5.14/0956</u> | Average Water Level (from TOC) <u>5.14</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Well Location <u>Site 1</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sample Date <u>04-11-05</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| Sampling Personnel <u>Ogle</u> | Well Depth MEAS <u>17.77</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| <u>Ramos</u> | Depth of Bottom of Tubing <u>9.4</u> | | |
| Sample ID <u>86-S1-109</u> | Depth to Water (w/ Tubing in Well) <u>5.10</u> | | |
| Duplicate ID <u> </u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1002 | .4 | .24 | 6.9 | 274 | 25.4 | 54092 | 3.4 | 1.2 | | | 5.14 | |
| 1005 | .4 | .10 | 6.8 | 79 | 25.1 | 55252 | 1.5 | .5 | | | 5.14 | |
| 1008 | .4 | .08 | 6.8 | 76 | 24.7 | 55912 | 9.9 | .7 | | | 5.14 | |
| 1011 | .4 | .06 | 6.8 | 46 | 24.3 | 57362 | 7.8 | 1.0 | | | 5.12 | |
| 1014 | .4 | .05 | 6.9 | 23 | 24.3 | 61921 | 9.3 | 1.3 | | | 5.10 | |
| 1017 | .4 | .05 | 6.9 | 24 | 24.1 | 61912 | 8.1 | 1.5 | | | 5.12 | |
| 1020 | .4 | .04 | 6.9 | 33 | 24.4 | 61994 | 7.6 | 1.7 | | | 5.12 | |
| 1023 | .4 | .04 | 6.9 | 32 | 24.5 | 60311 | 5.9 | 1.9 | | | 5.12 | |
| 1026 | .4 | .04 | 6.9 | 37 | 24.5 | 60919 | 6.4 | 2.2 | | | 5.12 | |
| 1029 | WELL STABLE - SAMPLES SECURED | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: samples effervesced in voas

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Number of Bottles <u>3X40ml, 6X1L amber,</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | <u>1X1L Poly, 1X250ml poly</u> |
| Turbidity Meter <u>Lamotte</u> | Serial Number <u> </u> | Field Notebook <u> </u> |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Sample Method <u>Low Flow</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| Interface Probe <u>Solinst</u> | Serial Number <u>#27582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>#00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>Geo - .45 Micron</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Number of Bottles 11

Field Notebook _____

Sample Method Low FLOW

Discharge Water Containerized ☒ Yes ☐ No



LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | | |
|--|---|--|---|
| Well Name <u>W1-19</u> | Screen Interval <u>14 - 19</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>Site 1 gw (semi-annual)</u> | Static Water Level (from TOC) / Time <u>4.55/1255</u> <u>4.55/1256</u> <u>4.55/1257</u> | Average Water Level (from TOC) <u>4.55</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PiD Readings (background) <u>0</u> | |
| Well Location <u>Site 1</u> | Reference Elevation <u> </u> | PiD Reading (TOC) <u>0</u> | |
| Sample Date <u>04-11-05</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| Sampling Personnel <u>Ogle</u> | Well Depth MEAS <u>21.35</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| <u>Ramos</u> | Depth of Bottom of Tubing <u>16.5</u> | | |
| Sample ID <u>86-S1-110</u> | Depth to Water (w/ Tubing in Well) <u>4.49</u> | | |
| Duplicate ID <u> </u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (umhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1302 | .4 | .52 | 7.0 | 337 | 23.9 | 23150 | 2.0 | 2 | | | 4.49 | |
| 1305 | .4 | .22 | 7.1 | 325 | 23.3 | 22854 | 1.5 | .5 | | | 4.52 | |
| 1308 | .4 | .10 | 7.0 | 316 | 22.9 | 23506 | 1.1 | .8 | | | 4.51 | |
| 1311 | .4 | .09 | 7.0 | 301 | 22.9 | 23026 | 1.4 | 1.0 | | | 4.51 | |
| 1314 | .4 | .07 | 7.0 | 204 | 22.8 | 24041 | 1.9 | 1.3 | | | 4.53 | |
| 1317 | .4 | .06 | 7.0 | 193 | 22.8 | 25194 | 1.8 | 1.5 | | | 4.50 | |
| 1320 | .4 | .05 | 6.9 | 189 | 22.7 | 25661 | 1.3 | 1.8 | | | 4.51 | |
| 1323 | .4 | .05 | 6.9 | 188 | 22.8 | 25878 | 1.3 | 2.1 | | | 4.53 | |
| 1326 | .4 | .05 | 6.9 | 186 | 22.8 | 25311 | 1.3 | 2.3 | | | 4.53 | |
| 1329 | WELL STABILIZED - SAMPLING. | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: samples effervesced in voas

FIELD EQUIPMENT

| | | |
|--|---------------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Number of Bottles <u>3X40ml, 6X1L amber,</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | <u>1X1L Poly, 1X250ml poly</u> |
| Turbidity Meter <u>Lamotte</u> | Serial Number <u> </u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Field Notebook <u> </u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>#27582</u> | |
| PiD/OVA <u>Mini-Rae</u> | Serial Number <u>#00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>Geo - .45 Micron</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Page 1 of 1Date 04-11-05

| | | | |
|--|---|--|---|
| Well Name <u>W1-22</u> | Screen Interval <u>NA</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>Site 1 gw (semi-annual)</u> | Static Water Level (from TOC) / Time <u>2.40/0925</u> <u>2.40/0926</u> <u>2.40/0927</u> | Average Water Level (from TOC) <u>2.40</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Well Location <u>Site 1</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sample Date <u>04-12-05</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| Sampling Personnel <u>Ogle</u> | Well Depth MEAS <u>6.70</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| <u>Ramos</u> | Depth of Bottom of Tubing <u>6</u> | | |
| Sample ID <u>86-S1-115</u> | Depth to Water (w/ Tubing in Well) <u>2.40</u> | | |
| Duplicate ID <u> </u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 0940 | .4 | .60 | 6.7 | 113 | 20.4 | 33458 | 5.0 | .25 | | | 2.36 | |
| 0943 | .4 | .20 | 6.9 | 101 | 21.0 | 32128 | 4.3 | .5 | | | 2.38 | |
| 0946 | .4 | .16 | 6.9 | 101 | 21.3 | 31463 | 2.7 | .8 | | | 2.40 | |
| 0949 | .4 | .15 | 6.9 | 102 | 21.6 | 30401 | 2.2 | 1.0 | | | 2.39 | |
| 0952 | .4 | .13 | 7.0 | 104 | 22.0 | 28303 | 2.2 | 1.3 | | | 2.41 | |
| 0955 | .4 | .12 | 7.0 | 104 | 22.3 | 27592 | 2.2 | 1.5 | | | 2.40 | |
| 0958 | .4 | .11 | 7.0 | 104 | 22.5 | 27468 | 2.2 | 1.8 | | | 2.39 | |
| 1001 | .4 | .10 | 7.0 | 102 | 22.6 | 27441 | 2.3 | 2.1 | | | 2.41 | |
| 1004 | .4 | .09 | 7.0 | 101 | 22.6 | 27374 | 2.3 | 2.3 | | | 2.40 | |
| 1007 | .4 | .09 | 7.0 | 100 | 22.6 | 27540 | 2.2 | 2.5 | | | 2.41 | |
| 1010 | WELL STABLE - SAMPLING | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PCBs | Pesticides | Dis. Metals | Dis. Mercury | | |
|------|-------|------|------------|-------------|--------------|--|--|
|------|-------|------|------------|-------------|--------------|--|--|

SAMPLE RATE

| .1L/min | .4L/min | .4L/min | .4L/min | .4L/min | .4L/min | | |
|---------|---------|---------|---------|---------|---------|--|--|
|---------|---------|---------|---------|---------|---------|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Number of Bottles <u>3X40ml, 6X1L amber, 1X1L Poly, 1X250ml poly</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| Turbidity Meter <u>Lamotte</u> | Serial Number <u> </u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Field Notebook <u> </u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>#R41906</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>#27582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>#00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>Geo - .45 Micron</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

| | | | |
|---------------------------------------|---|---|---|
| Well Name <u>WJ-24</u> | Screen Interval <u>6-16</u> | Station Elevation <u> </u> GND <u> </u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>1990-0866</u> | Static Water Level (from TOC) / Time <u>6.68/0854</u> <u>6.48/0855</u> <u>6.48/0855</u> | Average Water Level (from TOC) <u>6.68</u> | |
| Project No. <u>MFA</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Open</u> | |
| Well Location <u>Site 1</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Open</u> | |
| Sample Date <u>4/13/03</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| Sampling Personnel <u>D. HARRISON</u> | Well Depth MEAS <u>20.75</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-SI-119</u> | Depth of Bottom of Tubing <u> </u> | Depth to Water (w/ Tubing in Well) <u>6.68</u> | |
| Duplicate ID <u>N/A</u> | | | |

[illegible]

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be ≤ 0.33 foot

SAMPLE PARAMETERS

| SAMPLE PARAMETERS | | | | | | |
|-------------------|-----------|----------|----------|--------------|-------------|--|
| 3x VOL'S | 2x SROC'S | 2x PER'S | 2x Pest. | 1x D. Metc/s | 1x D. Merc. | |

SAMPLE RATE

| SAMPLE RATE | | | | | | | |
|-------------|---------|-----|-----|-----|-----|--|--|
| 0.1 U/M | 0.4 U/M | 0.4 | 0.4 | 0.4 | 0.4 | | |

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good

Condition of Well: Good
Remarks: Slight grey color / slight H₂S odor. VCL samples effervesced.

FIELD EQUIPMENT

NEED EQUIPMENT

| | | | | | |
|-------------------------|-------------------------|---------------|--------|-------------------------------|---|
| pH Meter | Hydrolab | Serial Number | R41906 | Number of Bottles | 11 |
| Temperature Meter | " | Serial Number | " | | |
| Turbidity Meter | La Motte | Serial Number | - | Field Notebook | |
| Spec. Elec. Cond. Meter | Hydrolab | Serial Number | R41906 | | |
| ORP Meter | " | Serial Number | " | Sample Method | LOW FLOW |
| D.O. Meter | " | Serial Number | " | | |
| Interface Probe | Solinst | Serial Number | 27582 | | |
| PID/OVA | Mini Roe | Serial Number | 00320 | | |
| Pump | Ceepump | Serial Number | BA0041 | | |
| Filter Apparatus | Quick Filter .45 micron | | | Discharge Water Containerized | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

OCTOBER 2005



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05Well Name W1-1RProject CTO 86-Site 1, Semi-AnnualProject No. 1990.086EWell Location Moffett-Site 1Sample Date 10/4/05Sampling Personnel D. HARRISONB. OgleScreen Interval 14.3-24.3Station Elevation GND TOC Static Water Level (from TOC) / Time 8.29/1409 8.29/1409 8.29/1410Average Water Level (from TOC) 8.29Reference Point TOCReference Elevation Static Elevation Well Depth MEAS 27.27 RPTD Depth of Bottom of Tubing 19.3Depth to Water (w/ Tubing in Well) 8.29Immiscible Phases Present ☐ Yes ☒ NoPID Readings (background) OppmPID Reading (TOC) OppmNotes Feet of Water Sample ID 86-S1-124Duplicate ID N/A

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1430 | .4 | 0.96 | 6.4 | 449 | 20.7 | 70180 | 0.7 | .1 | | | 8.31 | |
| 1433 | .4 | 0.73 | 6.5 | 382 | 20.8 | 70136 | 0.5 | .3 | | | 8.33 | |
| 1436 | .4 | 0.69 | 6.5 | 347 | 20.9 | 70082 | 0 | .5 | | | 8.35 | |
| 1439 | .4 | 0.24 | 6.5 | 320 | 20.7 | 69973 | 0 | .7 | | | 8.36 | |
| 1442 | .4 | 0.22 | 6.5 | 318 | 20.7 | 69943 | 0 | .9 | | | 8.36 | |
| 1445 | .4 | 0.20 | 6.5 | 316 | 20.6 | 69802 | 0 | 1.1 | | | 8.37 | |
| 1448 | Collect Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
|------|-------|-------|------|--------|----------|--|--|

SAMPLE RATE

| | | | | | | | |
|----------|----|----|----|----|----|--|--|
| .4 L/min | .4 | .4 | .4 | .4 | .4 | | |
|----------|----|----|----|----|----|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Goul - needs paintRemarks: Clear/odorless - for samples after 6:00

FIELD EQUIPMENT

pH Meter HYDROLABTemperature Meter HYDROLABTurbidity Meter HYDROLABSpec. Elec. Cond. Meter HYDROLABORP Meter HYDROLABD.O. Meter HYDROLABInterface Probe SOLINSTPID/OVA MINI-RAEPump GEO-PUMPFilter Apparatus GEO-45 MICRON - D. Metals + D. MercSerial Number #R41334Serial Number #R41334Serial Number LaMOTTESerial Number #R41334Serial Number #R41334Serial Number #R41334Serial Number #25582Serial Number #00320Serial Number BA0041Number of Bottles 3X40mLV4X1LA1XLP1X250mLPField Notebook Pg 91Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-5</u> | Screen Interval <u>14.5-19.5</u> | Station Elevation <u>GND</u> TOC | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>5.69/1504</u> <u>5.69/1504</u> <u>5.69/1505</u> | Average Water Level (from TOC) <u>5.69</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppw</u> | |
| Well Location <u>Moffett-Site 1</u> | Reference Elevation | PID Reading (TOC) <u>Oppw</u> | |
| Sample Date <u>10/6/05</u> | Static Elevation | Notes | |
| Sampling Personnel <u>D. HARRISON</u> | Well Depth MEAS <u>21.30</u> RPTD | Feet of Water | |
| <u>B. Ogle</u> | Depth of Bottom of Tubing <u>17</u> | | |
| Sample ID <u>86-S1-131</u> | Depth to Water (w/ Tubing in Well) <u>5.68</u> | | |
| Duplicate ID <u>86-S1-132</u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1225 | .4 | 0.51 | 6.5 | 93 | 23.3 | 59870 | 11.4 | .1 | | | 5.69 | |
| 1228 | .4 | 0.40 | 6.5 | 82 | 23.3 | 59563 | 9.6 | .3 | | | 5.70 | |
| 1231 | .4 | 0.13 | 6.5 | 67 | 23.3 | 58321 | 7.1 | .5 | | | 5.71 | |
| 1234 | .4 | 0.12 | 6.5 | 65 | 23.2 | 58018 | 4.5 | .7 | | | 5.72 | |
| 1237 | .4 | 0.11 | 6.5 | 63 | 23.2 | 57874 | 2.6 | .9 | | | 5.73 | |
| 1240 | Collect Sample | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCS | SVOCS | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
| | | | | | | | |

SAMPLE RATE

| | | | | | | | |
|--|--|--|--|--|--|--|--|
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|--|--|--|--|--|--|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Clear / slight H₂S odor - VOC samples effervesced.

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>3X40mLV</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>4X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>1XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>1X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pgs. 101 + 102</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON - D. Metals + D. Merc.</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-8</u> | Screen Interval <u>13-18</u> | Station Elevation <u>GND</u> TOC | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>5.76/1507</u> <u>5.76/1508</u> <u>5.76/1509</u> | Average Water Level (from TOC) <u>5.76</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppn</u> | |
| Well Location <u>Moffett, Site 1</u> | Reference Elevation | PID Reading (TOC) <u>Oppn</u> | |
| Sample Date <u>10/6/05</u> | Static Elevation | Notes | |
| Sampling Personnel <u>D. HARRISON</u> | Well Depth MEAS <u>22.67</u> RPTD | Feet of Water | |
| <u>B. Ogle</u> | Depth of Bottom of Tubing <u>15.5</u> | | |
| Sample ID <u>86-S1-133</u> | Depth to Water (w/ Tubing in Well) <u>5.76</u> | | |
| Duplicate ID <u>86-S1-134</u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading Location | PID/OVA Reading Value | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|--------------------------|-----------------------|----------------------------------|----------|
| 1345 | .4 | 0.87 | 6.7 | 63 | 23.5 | 60804 | 8.6 | .1 | | | 5.78 | |
| 1348 | .4 | 0.14 | 6.7 | 61 | 23.1 | 60753 | 8.4 | .3 | | | 5.79 | |
| 1351 | .4 | 0.12 | 6.7 | 60 | 23.0 | 60711 | 9.3 | .5 | | | 5.81 | |
| 1354 | .4 | 0.11 | 6.7 | 59 | 22.8 | 60648 | 8.9 | .7 | | | 5.83 | |
| 1355 | Collect Sample | | | | | | | | | | 5 | |
| 1405 | Collect Field Duplicate | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
|------|-------|-------|------|--------|----------|--|--|

SAMPLE RATE

| | | | | | | | |
|----|----|----|----|----|----|----|--|
| .1 | .4 | .4 | .4 | .4 | .4 | .4 | |
|----|----|----|----|----|----|----|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Green / H₂S odor

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>6X40mLV</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>8X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>2XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>2X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pgs. 102 + 103</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON - D. Metals + D. Merc</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05Well Name W1-12RProject CTO 86-Site 1, Semi-AnnualProject No. 1990.086EWell Location Moffett- Site 1Sample Date 10/6/05Sampling Personnel D. HARRISONB. OgleSample ID 86-S1-129Duplicate ID N/AScreen Interval 15-25Station Elevation GND TOCStatic Water Level (from TOC) / Time 3.04/1442 3.04/1443 3.04/1444Average Water Level (from TOC) 3.04Reference Point TOC

Reference Elevation

Static Elevation

Well Depth MEAS 26.64 RPTDDepth of Bottom of Tubing 20Depth to Water (w/ Tubing in Well) 3.04Immiscible Phases Present ☐ Yes ☒ NoPID Readings (background) OpenPID Reading (TOC) Open

Notes

Feet of Water

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1025 | .4 | 0.55 | 6.6 | 160 | 19.8 | 68703 | 31.8 | .1 | | | 3.05 | |
| 1029 | .4 | 0.38 | 6.6 | 160 | 19.8 | 68760 | 30.2 | .3 | | | 3.06 | |
| 1031 | .4 | 0.20 | 6.6 | 161 | 19.8 | 68671 | 25.4 | .5 | | | 3.06 | |
| 1034 | .4 | 0.15 | 6.5 | 163 | 19.9 | 68685 | 22.7 | .7 | | | 3.06 | |
| 1037 | .4 | 0.14 | 6.5 | 163 | 19.9 | 68687 | 21.8 | .9 | | | 3.06 | |
| 1040 | .4 | 0.13 | 6.5 | 164 | 19.9 | 68690 | 21.2 | 1.1 | | | 3.06 | |
| 1041 | Collect Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
|------|-------|-------|------|--------|----------|--|--|

SAMPLE RATE

| | | | | | | | |
|----|----|----|----|--|--|--|--|
| .1 | .4 | .4 | .4 | | | | |
|----|----|----|----|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Turbid / Strong H₂S odor

FIELD EQUIPMENT

pH Meter HYDROLABTemperature Meter HYDROLABTurbidity Meter HYDROLABSpec. Elec. Cond. Meter HYDROLABORP Meter HYDROLABD.O. Meter HYDROLABInterface Probe SOLINSTPID/OVA MINI-RAEPump GEO-PUMPFilter Apparatus GEO-45 MICRON - D. Metals + D. Merc.Serial Number #R41334Serial Number #R41334Serial Number LaMOTTESerial Number #R41334Serial Number #R41334Serial Number #R41334Serial Number #25582Serial Number #00320Serial Number BA0041Number of Bottles 3X40mL4X1LA1XLP1X250mLPField Notebook Pg 100Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



Page 1 of 1

Date 10/3/05

Number of Bottles 9X40mLV
12X1LA
3XLP
3X250mLV

Field Notebook Pg 99

Sample Method Low Flow

Discharge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-15</u> | Screen Interval <u>4.4-14.4</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>5.90/1403</u> <u>5.90/1404</u> <u>5.90/1405</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.90</u> | | |
| Well Location <u>Moffett-Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0ppm</u> | |
| Sample Date <u>10/4/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0ppm</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>B. Ogle</u> | Well Depth MEAS <u>17.46</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-125</u> | Depth of Bottom of Tubing <u>9.4</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>5.90</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|--|----------------------------------|----------|
| 1535 | .4 | 0.46 | 6.5 | -19 | 21.8 | 54440 | 22.8 | .2 | | | 5.93 | |
| 1538 | .4 | 0.40 | 6.6 | -21 | 21.7 | 56739 | 13.7 | .4 | | | 5.95 | |
| 1541 | .4 | 0.29 | 6.6 | -30 | 21.5 | 63278 | 9.0 | .6 | | | 5.96 | |
| 1544 | .4 | 0.27 | 6.7 | -31 | 21.4 | 64536 | 7.2 | .8 | | | 5.97 | |
| 1547 | .4 | 0.26 | 6.7 | -32 | 21.2 | 64824 | 6.4 | 1.0 | | | 5.98 | |
| 1550 | Collect Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCS | SVOCs | PEST. | PCBS | D.MERC | D.METALS | | |
|--------|-------|-------|------|--------|----------|--|--|
| 0.14/m | .4 | .4 | .4 | .4 | .4 | | |

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Clear/odorless - VOC samples collected

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>3X40mL</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>4X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>1XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>1X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pgs. 96 + 97</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON - D. Metals + D. Merc.</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-16</u> | Screen Interval <u>5.4-15.4</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>7.01/1517</u> <u>7.01/1518</u> <u>7.01/1518</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>7.01</u> | | |
| Well Location <u>Moffett- Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppm</u> | |
| Sample Date <u>10/6/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Oppm</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>B. Ogle</u> | Well Depth MEAS <u>18.24</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-136</u> | Depth of Bottom of Tubing <u>10.4</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>7.01</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1545 | .4 | 0.58 | 6.6 | 34 | 22.3 | 63084 | 28 | .2 | | | 7.03 | |
| 1548 | .4 | 0.24 | 6.6 | 24 | 22.0 | 63446 | 22.6 | .4 | | | 7.04 | |
| 1551 | .4 | 0.13 | 6.5 | 20 | 22.6 | 64327 | 16 | .6 | | | 7.05 | |
| 1554 | .4 | 0.12 | 6.6 | 18 | 22.3 | 64517 | 14.5 | .8 | | | 7.07 | |
| 1557 | .4 | 0.11 | 6.5 | 17 | 21.0 | 64722 | 14.1 | 1.0 | | | 7.09 | |
| 1600 | Collect Sample | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCS | SVOCS | PEST. | PCBS | D.MERC | D.METALS | | |
|-------------|-------|-------|------|--------|----------|--|--|
| Sample Rate | .4 | .4 | .4 | .4 | .4 | | |

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Turbid / Slight H₂S odor - VOC samples effervesced

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>3X40mLV</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>4X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>1XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>1X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pg 104</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON D. Metals + D. Merc.</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



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Date 10/3/05

Discharge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-22</u> | Screen Interval <u>N/A</u> | Station Elevation <u>GND</u> TOC | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>3.69/1448</u> <u>3.69/1449</u> <u>3.69/1450</u> | Average Water Level (from TOC) <u>3.69</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppm</u> | |
| Well Location <u>Moffett-Site 1</u> | Reference Elevation | PID Reading (TOC) <u>Oppm</u> | |
| Sample Date <u>10/6/05</u> | Static Elevation | Notes | |
| Sampling Personnel <u>D. HARRISON</u> | Well Depth MEAS <u>6.75</u> RPTD | Feet of Water | |
| <u>B. Ogle</u> | Depth of Bottom of Tubing | | |
| Sample ID <u>86-S1-130</u> | Depth to Water (w/ Tubing in Well) <u>3.69</u> | | |
| Duplicate ID <u>N/A</u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | EH/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|----------------------------------|----------|
| 1120 | .4 | 0.34 | 6.3 | 61 | 23.9 | 46217 | 320 | .2 | | 3.72 | |
| 1123 | .4 | 0.38 | 6.3 | 55 | 23.8 | 45727 | 176 | .4 | | 3.72 | |
| 1126 | .4 | 0.27 | 6.5 | 48 | 23.6 | 45831 | 118 | .6 | | 3.73 | |
| 1129 | .4 | 0.21 | 6.3 | 45 | 23.5 | 45264 | 83 | .8 | | 3.73 | |
| 1132 | .4 | 0.16 | 6.3 | 40 | 23.4 | 44827 | 45 | 1.0 | | 3.74 | |
| 1135 | .4 | 0.13 | 6.3 | 38 | 23.4 | 44014 | 18 | 1.2 | | 3.74 | |
| 1138 | .4 | 0.12 | 6.3 | 37 | 23.4 | 43862 | 16 | 1.4 | | 3.75 | |
| 1140 | .4 | 0.10 | 6.3 | 37 | 23.4 | 43570 | 15 | 1.6 | | 3.75 | |
| 1145 | Collect | Sample | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCs | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
| | | | | | | | |

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Turbid / Slight H₂S odor

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>3X40mLV</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>4X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>1XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>1X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pgs 100 + 101</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON - D. Metals + D. Merc</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-23</u> | Screen Interval <u>n/a</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>5.64/1438</u> <u>5.64/1439</u> <u>5.64/1440</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.64</u> | | |
| Well Location <u>Moffett-Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppm</u> | |
| Sample Date <u> </u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Oppm</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>B. Ogle</u> | Well Depth MEAS <u>3.94</u> RPTD <u>6.0</u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-127</u> | Depth of Bottom of Tubing <u>N 5.85</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>5.64</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 0950 | .3 | 2.02 | 7.3 | 406 | 25.1 | 84561 | 1000+ | .1 | | | 5.72 | |
| 0953 | .3 | 1.78 | 7.3 | 309 | 23.6 | 83322 | 1000+ | .2 | | | 5.76 | |
| 0954 | Trench ran dry | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCS | SVOCS | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
| — | — | — | — | — | — | | |

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Turbid / Stagnant No Scale

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>3X40mLV</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>4X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>1XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>1X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pg 99</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 10/3/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-24</u> | Screen Interval <u>6-16</u> | Station Elevation <u>GND</u> TOC | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, Semi-Annual</u> | Static Water Level (from TOC) / Time <u>7.34/1513</u> <u>7.34/1513</u> <u>7.34/1514</u> | Average Water Level (from TOC) <u>7.34</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Appu</u> | |
| Well Location <u>Moffett-Site 1</u> | Reference Elevation | PID Reading (TOC) <u>Appu</u> | |
| Sample Date <u>10/6/05</u> | Static Elevation | Notes | |
| Sampling Personnel <u>D. HARRISON</u> | Well Depth MEAS <u>20.25</u> RPTD | Feet of Water | |
| <u>B. Ogle</u> | Depth of Bottom of Tubing <u>11</u> | | |
| Sample ID <u>86-S1-135</u> | Depth to Water (w/ Tubing in Well) <u>7.34</u> | | |
| Duplicate ID <u>N/A</u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|--|----------------------------------|----------|
| 1500 | .4 | 0.94 | 6.6 | 30 | 21.8 | 59541 | 12 | .2 | | | 7.36 | |
| 1503 | .4 | 0.23 | 6.6 | 10 | 21.4 | 59674 | 9.7 | .4 | | | 7.37 | |
| 1506 | .4 | 0.21 | 6.5 | 9 | 20.7 | 59945 | 8.2 | .6 | | | 7.39 | |
| 1509 | .4 | 0.20 | 6.5 | 8 | 20.5 | 60221 | 6.3 | .8 | | | 7.40 | |
| 1510 | Collect Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| VOCs | SVOCS | PEST. | PCBS | D.MERC | D.METALS | | |
|------|-------|-------|------|--------|----------|--|--|
|------|-------|-------|------|--------|----------|--|--|

SAMPLE RATE

| | | | | | | | |
|----|----|----|----|----|----|--|--|
| .4 | .4 | .4 | .4 | .4 | .4 | | |
|----|----|----|----|----|----|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Clear / slight H₂S odor - VOC samples effervesced.

FIELD EQUIPMENT

| | | |
|--|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Number of Bottles <u>3X40mLV</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>4X1LA</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>LaMOTTE</u> | <u>1XLP</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | <u>1X250mLP</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Field Notebook <u>Pgs 103 + 104</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R41334</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON - D. Metals + D. Merc.</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

SUPPLEMENTAL SAMPLING DATA

JANUARY 2005



TETRA TECH INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | |
|-------------------------------------|---|---|
| Well Name <u>W1-1R</u> | Screen Interval <u>14.3 - 24.3</u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Station Elevation <u>GND</u> TOC <u> </u> | |
| Project No. <u>1990 . 086E</u> | Static Water Level (from TOC) / Time <u>7.75/1201</u> <u>7.79/1202</u> <u>7.75/1203</u> | |
| Well Location <u>Site 1</u> | Average Water Level (from TOC) <u>7.77</u> | |
| Sample Date <u>January 31, 2005</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> |
| Sampling Personnel <u>Ogle</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> |
| <u>Ramos</u> | Static Elevation <u> </u> | Notes <u> </u> |
| | Well Depth MEAS <u>27.45</u> RPTD <u> </u> | Feet of Water <u> </u> |
| Sample ID <u>86-S1-084</u> | Depth of Bottom of Tubing <u>19.3</u> | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>19.3</u> | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1455 | 0.4 | 0.21 | 6.6 | 236 | 22.6 | 66500 | 1.2 | 0.25 | | | | |
| 1458 | 0.4 | 0.11 | 6.6 | 218 | 22.3 | 67305 | 1.4 | 0.5 | | | | |
| 1501 | 0.4 | 0.11 | 6.6 | 222 | 21.7 | 67109 | 1 | 0.75 | | | | |
| 1504 | 0.4 | 0.11 | 6.6 | 226 | 21.4 | 66940 | 0.98 | 1 | | | | |
| 1507 | 0.4 | 0.1 | 6.6 | 234 | 21.1 | 66372 | 0.97 | 1.3 | | | | |
| 1510 | 0.4 | 0.09 | 6.6 | 240 | 20.8 | 66130 | 0.95 | 1.5 | | | | |
| 1513 | 0.4 | 0.09 | 6.6 | 242 | 20.8 | 66136 | 0.95 | 1.8 | | | | |
| 1516 | 0.4 | 0.09 | 6.6 | 243 | 20.7 | 66160 | 0.9 | 2 | | | | |
| 1519 | 0.4 | 0.09 | 6.6 | 242 | 20.6 | 66181 | 0.9 | 2.25 | | | | |
| 1522 | 0.4 | 0.09 | 6.6 | 242 | 20.6 | 66180 | 0.88 | 2.6 | | | | |
| 1525 | Well stabilized - began sampling | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Met. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Still need to paint

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>2 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>6.5"</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH P.W. INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | | |
|-------------------------------------|---|--|---|
| Well Name <u>W1-5</u> | Screen Interval <u>14.5 - 19.5</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Static Water Level (from TOC) / Time <u>5.32/1242</u> <u>5.32/1242</u> <u>5.32/1242</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.32</u> | | |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Sample Date <u>February 2, 2005</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sampling Personnel <u>Ogle</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>Ramos</u> | Well Depth MEAS <u>19.30</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-092</u> | Depth of Bottom of Tubing <u>17</u> | | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>5.3</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------------|-------------------------------------|-------------------------|----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1345 | 0.4 | 0.54 | 7 | 294 | 20.63 | 56250 | 1.3 | 0.25 | | | | |
| 1348 | 0.4 | 0.14 | 7 | 293 | 20.04 | 57034 | 0.9 | 0.5 | | | | |
| 1351 | 0.4 | 0.09 | 7 | 291 | 19.94 | 57043 | 0.8 | 0.75 | | | | |
| 1354 | 0.4 | 0.08 | 7 | 282 | 19.51 | 57940 | 0.6 | 1 | | | | |
| 1357 | 0.4 | 0.07 | 7 | 258 | 19.85 | 57716 | 0.2 | 1.3 | | | | |
| 1400 | 0.4 | 0.06 | 7 | 266 | 19.98 | 57700 | 0.2 | 1.6 | | | | |
| 1403 | 0.4 | 0.05 | 7 | 261 | 19.89 | 57688 | 0.2 | 1.8 | | | | |
| 1406 | 0.4 | 0.06 | 7 | 263 | 19.93 | 57739 | 0.2 | 2 | | | | |
| 1415 start | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>2 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>70</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Page 1 of 1Date January 31, 2005

| | | | |
|-------------------------------------|---|--|---|
| Well Name <u>W1-8</u> | Screen Interval <u>13 - 18</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Static Water Level (from TOC) / Time <u>5.35/1244</u> <u>5.34/1245</u> <u>5.35/1246</u> | Average Water Level (from TOC) <u>5.35</u> | PID Readings (background) <u>0</u> |
| Project No. <u>1990 . 086E</u> | Reference Point <u>TOC</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | Static Elevation <u> </u> | Notes <u> </u> |
| Sample Date <u>February 2, 2005</u> | Well Depth MEAS <u>22.68</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sampling Personnel <u>Ogle</u> | Depth of Bottom of Tubing <u>15.5</u> | | |
| <u>Ramos</u> | Depth to Water (w/ Tubing in well) <u>5.35</u> | | |
| Sample ID <u>86-S1-093</u> | | | |
| Duplicate ID <u>NA</u> | | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | EH/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|-----------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1425 | 0.4 | 0.23 | 7.4 | 295 | 23.32 | 39612 | 1.4 | 0.25 | | | | |
| 1428 | 0.4 | 0.15 | 7.4 | 293 | 23.67 | 39304 | 1.4 | 0.5 | | | | |
| 1431 | 0.4 | 0.1 | 7.4 | 291 | 23.94 | 38481 | 1.4 | 0.75 | | | | |
| 1434 | 0.4 | 0.09 | 7.4 | 288 | 24.05 | 36986 | 1.3 | 1 | | | | |
| 1437 | 0.4 | 0.08 | 7.4 | 278 | 23.59 | 36691 | 1.3 | 1.3 | | | | |
| 1440 | 0.4 | 0.08 | 7.4 | 281 | 23.66 | 36559 | 1.3 | 1.6 | | | | |
| 1443 | 0.4 | 0.09 | 7.3 | 278 | 23.59 | 36534 | 1.3 | 1.8 | | | | |
| 1446 | 0.4 | 0.08 | 7.3 | 277 | 23.58 | 36500 | 1.2 | 2 | | | | |
| 1449 | 0.4 | 0.09 | 7.3 | 280 | 23.59 | 36498 | 1.2 | 2.25 | | | | |
| 1452 | 0.4 | 0.09 | 7.3 | 279 | 23.6 | 36491 | 1.2 | 2.5 | | | | |
| 1500 stop | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>2 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>70</u> |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

| | | | | | |
|--------------------|---------------------|--------------------------------------|-------------------------------|---------------------------|---|
| Well Name | W1-12R | Screen Interval | 15 - 25 | Immiscible Phases Present | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project | CTO 86 Site 1 R7/05 | Station Elevation | GND TOC | | |
| Project No. | 1990 . 066E | Static Water Level (from TOC) / Time | 2.56/1233 2.58/1234 2.58/1235 | | |
| Well Location | Site 1 | Average Water Level (from TOC) | 2.58 | | |
| Sample Date | February 1, 2005 | Reference Point | TOC | PID Readings (background) | 0 |
| Sampling Personnel | Ogle | Reference Elevation | | PID Reading (TOC) | 0 |
| | Ramos | Static Elevation | | Notes | |
| | | Well Depth MEAS | 25.69 RPTD | Feet of Water | |
| Sample ID | 86-S1-089 | Depth of Bottom of Tubing | 20 | | |
| Duplicate ID | 86-S1-090 | Depth to Water (w/ Tubing in well) | 2.58 | | |

PURGING

[illegible]

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be ≤ 0.33 foot.

SAMPLE PARAMETERS

| | | | | | | | |
|----------|---------------|--|--|--|--|--|--|
| 4X SVOCs | 2 X Dis. Mer. | | | | | | |
|----------|---------------|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | |
|----|----|--|--|--|--|--|--|
| 04 | 04 | | | | | | |
|----|----|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good

Remarks: _____

FIELD EQUIPMENT

pH Meter _____ Hydrolab
 Temperature Meter _____ Hydrolab
 Turbidity Meter _____ Hydrolab
 Spec. Elec. Cond. Meter _____ Hydrolab
 ORP Meter _____ Hydrolab
 D.O. Meter _____ Hydrolab
 Interface Probe _____ Solinst
 PID/OVA _____ Mini-Rae
 Pump _____ Geo-Pump
 Filter Apparatus _____ NA

| | |
|---------------|--------|
| Serial Number | 3656 |
| Serial Number | 3656 |
| Serial Number | 3656 |
| Serial Number | 3656 |
| Serial Number | 3656 |
| Serial Number | 3656 |
| Serial Number | 25582 |
| Serial Number | 00320 |
| Serial Number | BA0041 |

Number of Bottles 4 X 1LA
2 X 250ml poly
 Field Notebook 68
 Sample Method Low Flow
 Discharge Water Containerized ☒ Yes ☐ No



TETRA TECH PAVING, INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | | |
|-------------------------------------|---|--|---|
| Well Name <u>W1-14</u> | Screen Interval <u>4.1 - 14.1</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Static Water Level (from TOC) / Time <u>5.21/1219</u> <u>5.22/1220</u> <u>5.20/1221</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.21</u> | | |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Sample Date <u>February 1, 2005</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sampling Personnel <u>Ogle</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>Ramos</u> | Well Depth MEAS <u>17.40</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-088</u> | Depth of Bottom of Tubing <u>9.1</u> | | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>5.21</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | EH/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|-----------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1325 | 0.4 | 0.22 | 6.9 | 161 | 23.3 | 54472 | 32 | 0.25 | | | | |
| 1328 | 0.4 | 0.12 | 7 | 158 | 22.9 | 54757 | 18 | 0.5 | | | | |
| 1331 | 0.4 | 0.11 | 7 | 152 | 22.7 | 55058 | 15 | 0.75 | | | | |
| 1334 | 0.4 | 0.07 | 7 | 148 | 33.7 | 55170 | 13 | 1 | | | | |
| 1337 | 0.4 | 0.07 | 7 | 146 | 22.6 | 55220 | 12 | 1.3 | | | | |
| 1340 | 0.4 | 0.06 | 7 | 122 | 22.6 | 55289 | 13 | 1.6 | | | | |
| 1343 | 0.4 | 0.07 | 7 | 85 | 22.8 | 57362 | 10 | 1.8 | | | | |
| 1346 | 0.4 | 0.07 | 7 | 88 | 22.6 | 55111 | 7 | 2 | | | | |
| 1349 | 0.4 | 0.07 | 7 | 85 | 22.6 | 55090 | 4.5 | 2.25 | | | | |
| 1352 | 0.4 | 0.07 | 7 | 84 | 22.6 | 55118 | 4 | 2.5 | | | | |
| 1400 stop | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 3 X SVOCs | 1 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>3 X 11A</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>67</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH P.A. INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | |
|-------------------------------------|---|---|
| Well Name <u>W1-15</u> | Screen Interval <u>4.4 - 14.4</u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Station Elevation <u>GND</u> TOC <u> </u> | |
| Project No. <u>1990.086E</u> | Static Water Level (from TOC) / Time <u>5.43/1207</u> <u>5.43/1208</u> <u>5.42/1209</u> | |
| Well Location <u>Site 1</u> | Average Water Level (from TOC) <u>5.43</u> | |
| Sample Date <u>February 1, 2005</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> |
| Sampling Personnel <u>Ogle</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> |
| <u>Ramos</u> | Static Elevation <u> </u> | Notes <u> </u> |
| | Well Depth MEAS <u>17.76</u> RPTD <u> </u> | Feet of Water <u> </u> |
| Sample ID <u>86-S1-085</u> | Depth of Bottom of Tubing <u>9.4</u> | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>5.4</u> | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 754 | 0.4 | 0.47 | 6.8 | 206 | 12.7 | 54859 | 20 | 0.25 | | | | |
| 757 | 0.4 | 0.2 | 6.8 | 159 | 13.3 | 55033 | 19 | 0.5 | | | | |
| 800 | 0.4 | 0.13 | 6.8 | 67 | 14.9 | 55062 | 4.9 | 0.75 | | | | |
| 803 | 0.4 | 0.11 | 6.8 | 60 | 15.3 | 54986 | 3.3 | 1 | | | | |
| 806 | 0.4 | 0.09 | 6.7 | 49 | 16.7 | 56833 | 3 | 1.3 | | | | |
| 809 | 0.4 | 0.09 | 6.7 | 44 | 16.9 | 50850 | 3 | 1.5 | | | | |
| 812 | 0.4 | 0.08 | 6.7 | 48 | 17 | 50623 | 1.8 | 1.8 | | | | |
| 815 | 0.4 | 0.08 | 6.7 | 44 | 17 | 50613 | 1.8 | 2 | | | | |
| 818 | 0.4 | 0.08 | 6.7 | 44 | 17.1 | 50589 | 1.7 | 2.25 | | | | |
| 821 | Well stabilized - began sampling | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 6 X SVOCs | 3 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>6 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>3 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>66</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

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| | | |
|-------------------------------------|---|---|
| Well Name <u>W1-16</u> | Screen Interval <u>5.4-15.4</u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Station Elevation <u>GND</u> TOC <u></u> | |
| Project No. <u>1990 - 086E</u> | Static Water Level (from TOC) / Time <u>7.60/1255</u> <u>7.50/1256</u> <u>7.39/1257</u> | |
| Well Location <u>Site 1</u> | Average Water Level (from TOC) <u>7.50</u> | |
| Sample Date <u>February 2, 2005</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> |
| Sampling Personnel <u>Ogle</u> | Reference Elevation <u></u> | PID Reading (TOC) <u>0</u> |
| <u>Ramos</u> | Static Elevation <u></u> | Notes <u></u> |
| | Well Depth MEAS <u>18.22</u> RPTD <u></u> | Feet of Water <u></u> |
| Sample ID <u>86-S1-095</u> | Depth of Bottom of Tubing <u>10.4</u> | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>7.50</u> | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|-----------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1600 | 0.4 | 0.42 | 6.8 | 106 | 24.65 | 61461 | 1.2 | 0.25 | | | | |
| 1603 | 0.4 | 0.17 | 6.8 | 96 | 24.32 | 62006 | 0.3 | 0.5 | | | | |
| 1606 | 0.4 | 0.13 | 6.8 | 85 | 24.09 | 62069 | 0.2 | 0.75 | | | | |
| 1609 | 0.4 | 0.1 | 6.8 | 77 | 23.91 | 62121 | 0.1 | 1 | | | | |
| 1612 | 0.4 | 0.07 | 6.8 | 67 | 23.56 | 62241 | 0.4 | 1.3 | | | | |
| 1615 | 0.4 | 0.06 | 6.8 | 70 | 23.55 | 62155 | 0.4 | 1.6 | | | | |
| 1618 | 0.4 | 0.04 | 6.8 | 67 | 23.48 | 62190 | 0.4 | 1.8 | | | | |
| 1621 | 0.4 | 0.05 | 6.8 | 66 | 23.46 | 62154 | 0.3 | 2 | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 1630 star | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>2 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>71</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Date Januray 31, 2005

| | | |
|-------------------------------------|---|---|
| Well Name <u>W1-19</u> | Screen Interval <u>14 - 19</u> | |
| Project <u>CTO 86 Site 1 R7/05</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project No. <u>1990 . 086E</u> | Static Water Level (from TOC) / Time <u>4.76/1214</u> <u>4.75/1215</u> <u>4.77/1216</u> | |
| Well Location <u>Site 1</u> | Average Water Level (from TOC) <u>4.76</u> | |
| Sample Date <u>February 1, 2005</u> | Reference Point <u> </u> TOC <u> </u> | PID Readings (background) <u>0</u> |
| Sampling Personnel <u>Ogle</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> |
| <u>Ramos</u> | Static Elevation <u> </u> | Notes <u> </u> |
| | Well Depth MEAS <u>21.20</u> RPTD <u> </u> | Feet of Water <u> </u> |
| Sample ID <u>86-S1-086</u> | Depth of Bottom of Tubing <u>16.5</u> | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>4.77</u> | |

PURGING

[illegible]

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be < 0.33 foot

SAMPLE PARAMETERS

| | | | | | | |
|-----------|---------------|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Mer. | | | | | |
|-----------|---------------|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | |
|-----|-----|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | |
|-----|-----|--|--|--|--|--|--|

Notes:

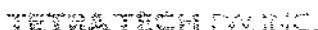
1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good

Remarks: _____

FIELD EQUIPMENT

| | | | | | |
|-------------------------|----------|---------------|--------|-------------------------------|---|
| pH Meter | Hydrolab | Serial Number | 3656 | Number of Bottles | 2 X 1LA |
| Temperature Meter | Hydrolab | Serial Number | 3656 | | 1 X 250ml poly |
| Turbidity Meter | Hydrolab | Serial Number | 3656 | | |
| Spec. Elec. Cond. Meter | Hydrolab | Serial Number | 3656 | Field Notebook | 67 |
| ORP Meter | Hydrolab | Serial Number | 3656 | | |
| D.O. Meter | Hydrolab | Serial Number | 3656 | Sample Method | Low Flow |
| Interface Probe | Solinst | Serial Number | 25582 | | |
| PID/OVA | Mini-Rae | Serial Number | 00320 | | |
| Pump | Geo-Pump | Serial Number | BA0041 | | |
| Filter Apparatus | NA | | | Discharge Water Containerized | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



Page 1 of 1

Date January 31, 2005[illegible]

SAMPLE PARAMETERS

| | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Mer. | | | | | | |
|-----------|---------------|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | |
|-----|-----|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | |
|-----|-----|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good

Remarks: _____

FIELD EQUIPMENT

| | | |
|--|----------------------------------|---|
| pH Meter _____ Hydrolab _____ | Serial Number _____ 3656 _____ | Number of Bottles _____ 2 X 1LA _____ |
| Temperature Meter _____ Hydrolab _____ | Serial Number _____ 3656 _____ | _____ 1 X 250ml poly _____ |
| Turbidity Meter _____ Hydrolab _____ | Serial Number _____ 3656 _____ | _____ |
| Spec. Elec. Cond. Meter _____ Hydrolab _____ | Serial Number _____ 3656 _____ | Field Notebook <u>69</u> _____ |
| ORP Meter _____ Hydrolab _____ | Serial Number _____ 3656 _____ | _____ |
| D.O. Meter _____ Hydrolab _____ | Serial Number _____ 3656 _____ | Sample Method _____ Low Flow _____ |
| Interface Probe _____ Solinst _____ | Serial Number _____ 25582 _____ | _____ |
| PID/OVA _____ Mini-Rae _____ | Serial Number _____ 00320 _____ | _____ |
| Pump _____ Geo-Pump _____ | Serial Number _____ BA0041 _____ | _____ |
| Filter Apparatus _____ NA _____ | _____ | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Discharge Water Containerized ☒ Yes ☐ No



TETRA TECH, INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Page 1 of 1Date January 31, 2005

| | | |
|-------------------------------------|---|---|
| Well Name <u>W1-23</u> | Screen Interval <u>NA</u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Station Elevation <u>GND</u> TOC <u> </u> | |
| Project No. <u>1990 - 086E</u> | Static Water Level (from TOC) / Time <u>5.61/1227</u> <u>5.61/1228</u> <u>5.60/1229</u> | |
| Well Location <u>Site 1</u> | Average Water Level (from TOC) <u>5.61</u> | |
| Sample Date <u>February 1, 2005</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> |
| Sampling Personnel <u>Ogle</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> |
| <u>Ramos</u> | Static Elevation <u> </u> | Notes <u> </u> |
| | Well Depth MEAS <u>6.00</u> RPTD <u> </u> | Feet of Water <u> </u> |
| Sample ID <u>86-S1-087</u> | Depth of Bottom of Tubing <u>6.0</u> | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>5.61</u> | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|----------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1414 | 0.4 | 0.3 | 7.2 | 157 | 28.4 | 82139 | err | 0.25 | | | | |
| 1417 | 0.4 | 0.22 | 7.2 | 154 | 27.7 | 82873 | err | 0.5 | | | | |
| 1420 | 0.4 | 0.2 | 7.3 | 157 | 27.4 | 83966 | err | 0.75 | | | | |
| 1423 | 0.4 | 0.2 | 7.3 | 159 | 27.7 | 85362 | err | 1 | | | | |
| 1426 | 0.4 | 0.2 | 7.3 | 156 | 27.7 | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Well emp | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 3 X SVOCs | 1 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>3 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>68</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH, INC.

LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Page 1 of 1Date January 31, 2005

| | | | |
|-------------------------------------|---|--|---|
| Well Name <u>W1-24</u> | Screen Interval <u>6 - 16</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86 Site 1 R7/05</u> | Static Water Level (from TOC) / Time <u>6.98/1251</u> <u>6.98/1252</u> <u>6.99/1253</u> | | |
| Project No. <u>1990 - 086E</u> | Average Water Level (from TOC) <u>6.98</u> | | |
| Well Location <u>Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Sample Date <u>February 2, 2005</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0</u> | |
| Sampling Personnel <u>Ogle</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>Ramos</u> | Well Depth MEAS <u>20.28</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-094</u> | Depth of Bottom of Tubing <u>11</u> | | |
| Duplicate ID <u>NA</u> | Depth to Water (w/ Tubing in well) <u>6.98</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1515 | 0.4 | 0.21 | 7 | 84 | 24.08 | 50279 | 1.4 | 0.25 | | | | |
| 1518 | 0.4 | 0.11 | 7 | 85 | 24.19 | 49792 | 1.4 | 0.5 | | | | |
| 1521 | 0.4 | 0.08 | 7 | 73 | 24.24 | 49489 | 1.3 | 0.75 | | | | |
| 1524 | 0.4 | 0.08 | 6.9 | 64 | 24.65 | 49590 | 1.3 | 1 | | | | |
| 1527 | 0.4 | 0.07 | 6.9 | 61 | 24.8 | 49856 | 0.4 | 1.3 | | | | |
| 1530 | 0.4 | 0.07 | 6.9 | 60 | 24.74 | 49771 | 0.4 | 1.6 | | | | |
| 1533 | 0.4 | 0.08 | 6.9 | 55 | 24.67 | 49680 | 0.4 | 1.8 | | | | |
| 1536 | 0.4 | 0.08 | 6.9 | 57 | 24.69 | 49663 | 0.3 | 2 | | | | |
| 1539 | 0.4 | 0.08 | 6.9 | 58 | 24.7 | 40692 | 0.3 | 2.25 | | | | |
| 1545 start | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|
| 2 X SVOCs | 1 X Dis. Mer. | | | | | | | | | | | |
|-----------|---------------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|
| 0.4 | 0.4 | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|-----------------------------|---|
| pH Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Number of Bottles <u>2 X 1LA</u> |
| Temperature Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | <u>1 X 250ml poly</u> |
| Turbidity Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Field Notebook <u>71</u> |
| Spec. Elec. Cond. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | Sample Method <u>Low Flow</u> |
| ORP Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| D.O. Meter <u>Hydrolab</u> | Serial Number <u>3656</u> | |
| Interface Probe <u>Solinst</u> | Serial Number <u>25582</u> | |
| PID/OVA <u>Mini-Rae</u> | Serial Number <u>00320</u> | |
| Pump <u>Geo-Pump</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>NA</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

MARCH 2005



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---------------------------------------|---|--|---|
| Well Name <u>W1-1R</u> | Screen Interval <u>14.3-24.3</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>7.20/0904</u> <u>7.21/0905</u> <u>7.21/0906</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>7.21</u> | | |
| Well Location <u>Moffett-Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0 ppm</u> | |
| Sample Date <u>3/7/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0 ppm</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>M. RAMOS</u> | Well Depth MEAS <u>27.46</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-096</u> | Depth of Bottom of Tubing <u>19.3</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>7.21</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1019 | .4 | .43 | 7.3 | 455 | 23.1 | 1812 | 0 | .1 | | | 7.23 | |
| 1022 | .4 | .32 | 7.3 | 440 | 23.0 | 2231 | 0 | .3 | | | 7.26 | |
| 1025 | .4 | .17 | 7.3 | 417 | 22.8 | 3125 | 0 | .5 | | | 7.27 | |
| 1028 | .4 | 0.12 | 7.3 | 394 | 22.9 | 4320 | 0 | .7 | | | 7.27 | |
| 1031 | .4 | 0.09 | 7.3 | 391 | 22.8 | 5682 | 0 | .9 | | | 7.24 | |
| 1034 | .4 | 0.07 | 7.3 | 388 | 22.9 | 5925 | 0 | 1.1 | | | 7.27 | |
| 1035 | Collect Sample | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|---------|-----------|--|--|--|--|--|--|--|--|--|--|--|
| 2XSVOCS | 1xD.MERC. | | | | | | | | | | | |
|---------|-----------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|--|
| .4 | .4 | | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: Good - Needs paintRemarks: Odor-free / Colorless

FIELD EQUIPMENT

| | |
|---|------------------------------|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> |
| Filter Apparatus <u>GEO-.45 MICRON</u> | |

Number of Bottles 2X1LA
1X250mLPField Notebook Pg. 74Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---------------------------------------|---|--|---|
| Well Name <u>W1-5</u> | Screen Interval <u>14.5-19.5</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>4.80/0947</u> <u>4.80/0947</u> <u>4.80/0948</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>4.80</u> | | |
| Well Location <u>Moffett- Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Open</u> | |
| Sample Date <u>3/8/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Open</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>M. RAMOS</u> | Well Depth MEAS <u>21.28</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-103</u> | Depth of Bottom of Tubing <u>17</u> | | |
| Duplicate ID <u>86-S1-104</u> | Depth to Water (w/ Tubing in Well) <u>4.80</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 0950 | .4 | 2.40 | 7.3 | 383 | 24.4 | 1216 | 9.0 | .1 | | | 4.82 | |
| 0953 | .4 | 1.62 | 7.3 | 351 | 23.6 | 4390 | 6.2 | .3 | | | 4.84 | |
| 0956 | .4 | 0.23 | 7.3 | 333 | 22.1 | 8710 | 2.7 | .5 | | | 4.85 | |
| 0959 | .4 | 0.18 | 7.3 | 244 | 22.5 | 10237 | 2.4 | .7 | | | 4.86 | |
| 1002 | .4 | 0.15 | 7.3 | 228 | 22.7 | 10105 | 2.0 | .9 | | | 4.87 | |
| 1005 | .4 | 0.11 | 7.3 | 211 | 23.0 | 10431 | 2.0 | 1.1 | | | 4.88 | |
| 1007 | Collect | Sample | | | | | | | | | | |
| 1015 | Collect | Field Duplicate | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SVOC's | D.MERC. | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|--|
| .4 | .4 | | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

pH Meter HYDROLAB
 Temperature Meter HYDROLAB
 Turbidity Meter HYDROLAB
 Spec. Elec. Cond. Meter HYDROLAB
 ORP Meter HYDROLAB
 D.O. Meter HYDROLAB
 Interface Probe SOLINST
 PID/OVA MINI-RAE
 Pump GEO-PUMP
 Filter Apparatus GEO-45 MICRON

Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #25582
 Serial Number #00320
 Serial Number BA0041

Number of Bottles 4x1LA
2x250mLP

Field Notebook Pgs 78+79Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---------------------------------------|---|--|---|
| Well Name <u>W1-8</u> | Screen Interval <u>13-18</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>4.88/0951</u> <u>4.88/0952</u> <u>4.88/0952</u> | | |
| Project No. <u>1990,086E</u> | Average Water Level (from TOC) <u>4.88</u> | | |
| Well Location <u>Moffett- Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0ppm</u> | |
| Sample Date <u>3/8/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>0ppm</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>M. RAMOS</u> | Well Depth MEAS <u>22.70</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-105</u> | Depth of Bottom of Tubing <u>15.5</u> | | |
| Duplicate ID <u>n/a</u> | Depth to Water (w/ Tubing in Well) <u>4.88</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1050 | .4 | 0.86 | 7.4 | 360 | 26.5 | 1402 | 2.5 | .1 | | | 4.91 | |
| 1053 | .4 | 0.52 | 7.4 | 360 | 24.8 | 3270 | 1.0 | .3 | | | 4.93 | |
| 1056 | .4 | 0.51 | 7.4 | 360 | 24.2 | 9470 | 3.8 | .5 | | | 4.94 | |
| 1059 | .4 | 0.88 | 7.4 | 359 | 23.8 | 9380 | 4.4 | .7 | | | 4.96 | |
| 1052 | .4 | 0.05 | 7.4 | 359 | 23.6 | 9240 | 4.1 | .9 | | | 4.97 | |
| 1055 | Collect Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute

2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SVOC's | D.MERC. | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 c/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute

2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Slight green / Slight N2S odor

FIELD EQUIPMENT

pH Meter HYDROLAB
 Temperature Meter HYDROLAB
 Turbidity Meter HYDROLAB
 Spec. Elec. Cond. Meter HYDROLAB
 ORP Meter HYDROLAB
 D.O. Meter HYDROLAB
 Interface Probe SOLINST
 PID/OVA MINI-RAE
 Pump GEO-PUMP
 Filter Apparatus GEO-45 MICRON

Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #25582
 Serial Number #00320
 Serial Number BA0041

Number of Bottles 2x1LA
1x250mLP

Field Notebook Pg. 79Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---------------------------------------|---|--|---|
| Well Name <u>W1-12R</u> | Screen Interval <u>15-25</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, RB/05</u> | Static Water Level (from TOC) / Time <u>2.02/0938</u> <u>2.02/0939</u> <u>2.02/0940</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>2.02</u> | | |
| Well Location <u>Moffett-Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppm</u> | |
| Sample Date <u>3/7/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Oppm</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>M. RAMOS</u> | Well Depth MEAS <u> </u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-101</u> | Depth of Bottom of Tubing <u>20</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>2.02</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|--|----------------------------------|----------|
| 1445 | .4 | 0.61 | 7.1 | 355 | 27.1 | 1210 | 40 | .1 | | | 2.02 | |
| 1448 | .4 | 0.33 | 7.1 | 341 | 26.7 | 1362 | 44 | .3 | | | 2.02 | |
| 1451 | .4 | 0.15 | 7.1 | 325 | 25.6 | 1475 | 39 | .5 | | | 2.02 | |
| 1454 | .4 | 0.11 | 7.1 | 294 | 25.4 | 1492 | 34 | .7 | | | 2.02 | |
| 1457 | .4 | 0.08 | 7.1 | 290 | 25.1 | 1522 | 35 | .9 | | | 2.02 | |
| 1500 | Collect Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-------|--------|--|--|--|--|--|--|--|--|--|--|--|
| SVOCs | D.MERC | | | | | | | | | | | |
|-------|--------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 L/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Green/turbid water - slight H₂S odor

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Number of Bottles <u>2X1A</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | <u>1x250mLP</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Field Notebook <u>Pgs 76+77</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | Sample Method <u>Low Flow</u> |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---------------------------------------|---|--|---|
| Well Name <u>W1-14</u> | Screen Interval <u>4.1-14.1</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>4.60/0930</u> <u>4.60/0951</u> <u>4.60/0932</u> | | |
| Project No. <u>1990.088E</u> | Average Water Level (from TOC) <u>4.60</u> | | |
| Well Location <u>Moffett- Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Open</u> | |
| Sample Date <u>3/7/05</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Open</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| <u>M. RAMOS</u> | Well Depth MEAS <u>17.71</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>88-S1-100</u> | Depth of Bottom of Tubing <u>9.1</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>4.60</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|--|----------------------------|-----|----------------|---------------|---------------------------------------|--------------------|--|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1327 | .4 | 1.06 | 7.0 | 176 | 16.9 | 61095 | 8.6 | .1 | | | 4.61 | |
| 1330 | .4 | 0.80 | 7.1 | 150 | 17.0 | 60987 | 7.0 | .3 | | | 4.62 | |
| 1333 | .4 | 0.52 | 7.1 | 144 | 17.2 | 60536 | 5.2 | .5 | | | 4.62 | |
| 1336 | .4 | 0.27 | 7.1 | 142 | 17.1 | 60289 | 3.3 | .7 | | | 4.62 | |
| 1339 | .4 | 0.25 | 7.1 | 138 | 17.2 | 60376 | 3.9 | .9 | | | 4.63 | |
| 1340 | Collect Sample | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SVOCs | D.MERC. | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 L/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks:

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Number of Bottles <u>2X1LA</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | <u>1X250mLP</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Field Notebook <u>Pgs. 75+76</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | Sample Method <u>Low Flow</u> |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|--|---|--|---|
| Well Name <u>W1-15</u> | Screen Interval <u>4.4-14.4</u> | Station Elevation <u>GND</u> TOC | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>4.82/0408</u> <u>4.82/0909</u> <u>4.82/0910</u> | Average Water Level (from TOC) <u>4.82</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppn</u> | |
| Well Location <u>Moffett Site 1</u> | Reference Elevation | PID Reading (TOC) <u>Oppn</u> | |
| Sample Date <u>3/7/05</u> | Static Elevation | Notes | |
| Sampling Personnel <u>D. HARRISON</u> <u>M. RAMOS</u> | Well Depth MEAS <u>17.75</u> RPTD | Feet of Water | |
| Sample ID <u>86-S1-097</u> | Depth of Bottom of Tubing <u>9.4</u> | | |
| Duplicate ID <u>collect ms/msd</u> | Depth to Water (w/ Tubing in Well) <u>4.82</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | EH/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|----------------------------------|----------|
| 1114 | .4 | 0.54 | 6.8 | 413 | 25.8 | 26852 | 100 | .1 | | 4.86 | |
| 1117 | .4 | 0.38 | 6.8 | 352 | 24.4 | 27736 | 72 | .3 | | 4.87 | |
| 1120 | .4 | 0.16 | 6.9 | 136 | 23.7 | 29210 | 41 | .5 | | 4.87 | |
| 1123 | .4 | 0.10 | 6.9 | 44 | 22.4 | 30144 | 19 | .7 | | 4.87 | |
| 1126 | .4 | 0.08 | 6.9 | 45 | 22.3 | 30544 | 9 | .9 | | 4.90 | |
| 1129 | .4 | 0.07 | 6.9 | 44 | 22.1 | 30462 | 5 | 1.1 | | 4.92 | |
| 1130 | Collect Sample | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|
| SVOCs | D.MERC. | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|
| .4 | .4 | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Green / Turbid water

FIELD EQUIPMENT

pH Meter HYDROLAB
 Temperature Meter HYDROLAB
 Turbidity Meter HYDROLAB
 Spec. Elec. Cond. Meter HYDROLAB
 ORP Meter HYDROLAB
 D.O. Meter HYDROLAB
 Interface Probe SOLINST
 PID/OVA MINI-RAE
 Pump GEO-PUMP
 Filter Apparatus GEO-45 MICRON

Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #R10797
 Serial Number #25582
 Serial Number #00320
 Serial Number BA0041

Number of Bottles 6X1LA
3X250mLP

Field Notebook Pgs. 74 + 75Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



TETRA TECH P.W., INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---|---|--|---|
| Well Name <u>W1-16</u> | Screen Interval <u>5.4-15.4</u> | Station Elevation <u>GND</u> TOC <u> </u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>7.10/0958</u> <u>7.10/0959</u> <u>7.10/1000</u> | Average Water Level (from TOC) <u>7.10</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Open</u> | |
| Well Location <u>Moffett- Site 1</u> | Reference Elevation <u> </u> | PID Reading (TOC) <u>Open</u> | |
| Sample Date <u>3/8/05</u> | Static Elevation <u> </u> | Notes <u> </u> | |
| Sampling Personnel <u>D. HARRISON</u> <u>M RAMOS</u> | Well Depth MEAS <u>18.24</u> RPTD <u> </u> | Feet of Water <u> </u> | |
| Sample ID <u>86-S1-107</u> | Depth of Bottom of Tubing <u>10.4</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u> </u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1610 | .4 | 0.29 | 6.9 | 120 | 33.8 | 3351 | 4.7 | .1 | | | 7.13 | |
| 1613 | .4 | 0.21 | 6.9 | 107 | 33.2 | 4920 | 5.0 | .3 | | | 7.15 | |
| 1614 | .4 | 0.11 | 6.9 | 99 | 31.4 | 8516 | 4.9 | .5 | | | 7.18 | |
| 1619 | .4 | 0.08 | 7.0 | 97 | 30.6 | 9232 | 5.1 | .7 | | | 7.22 | |
| 1622 | .4 | 0.06 | 7.0 | 96 | 30.5 | 9477 | 4.0 | .9 | | | 7.24 | |
| 1625 | Collect Sample | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SVOC's | D.MERC. | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 L/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Clear / slight H₂S odor

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Number of Bottles <u>2X11A</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | <u>1X250mL.P</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Field Notebook <u>Pgs. 80+81</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH P.W., INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|--|---|---|---|
| Well Name <u>W1-19</u> | Screen Interval <u>14-19</u> | Station Elevation <u>GND</u> TOC <u>TOC</u> | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>4.18/0922</u> <u>4.18/0923</u> <u>4.18/0924</u> | Average Water Level (from TOC) <u>4.18</u> | |
| Project No. <u>1990.086E</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Oppn</u> | |
| Well Location <u>Moffett, Site 1</u> | Reference Elevation <u></u> | PID Reading (TOC) <u>Oppn</u> | |
| Sample Date <u>3/7/05</u> | Static Elevation <u></u> | Notes <u></u> | |
| Sampling Personnel <u>D. HARRISON</u> <u>M. RAMOS</u> | Well Depth MEAS <u>21.20</u> RPTD <u></u> | Feet of Water <u></u> | |
| Sample ID <u>86-S1-098</u> | Depth of Bottom of Tubing <u>16.5</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>4.18</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | EH/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading Location | PID/OVA Reading Value | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|--------------------------|-----------------------|----------------------------------|----------|
| 1230 | .4 | 0.70 | 7.0 | 317 | 30.2 | 7.5436 | 1.5 | .1 | | | 4.20 | |
| 1233 | .4 | 0.62 | 7.0 | 251 | 29.8 | 11520 | 1.7 | .3 | | | 4.22 | |
| 1236 | .4 | 0.17 | 7.0 | 245 | 29.0 | 12260 | 0.4 | .5 | | | 4.24 | |
| 1239 | .4 | 0.14 | 7.0 | 236 | 28.1 | 13450 | 0.6 | .8 | | | 4.27 | |
| 1240 | Collect Sample | | | | | | | | | | | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SVOCs | D.MERC. | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 L/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Colorless/Odorless

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Number of Bottles <u>2X1LA</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | <u>1x250mLP</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Field Notebook <u>Pg. 75</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Sample Method <u>Low Flow</u> |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH F.W. INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05Well Name W1-22Project CTO 86-Site 1, R8/05Project No. 1990.086EWell Location Moffett-Site 1Sample Date 3/3/05Sampling Personnel D. HARRISONM. RAMOSSample ID 86-S1-102Duplicate ID N/AScreen Interval N/AStation Elevation GND TOCStatic Water Level (from TOC) / Time 2.95/0942 2.95/0943 2.95/0944Average Water Level (from TOC) 2.95Reference Point TOC

Reference Elevation

Static Elevation

Well Depth MEAS 6.64 RPTDDepth of Bottom of Tubing 6.00Depth to Water (w/ Tubing in Well) 2.95Immiscible Phases Present ☐ Yes ☒ NoPID Readings (background) OppmPID Reading (TOC) Oppm

Notes

Feet of Water

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 0830 | .4 | 0 | 6.3 | 191 | 14.6 | 18.2 | 450 | .1 | | | 2.99 | |
| 0833 | .4 | 0 | 6.4 | 175 | 14.9 | 364 | 327 | .3 | | | 3.04 | |
| 0836 | .4 | 0 | 6.4 | 160 | 15.3 | 2192 | 150 | .5 | | | 3.07 | |
| 0839 | .4 | 0 | 6.5 | 150 | 15.3 | 2108 | 95 | .7 | | | 3.08 | |
| 0842 | .4 | 0 | 6.7 | 148 | 15.7 | 5213 | 87 | .9 | | | 3.09 | |
| 0845 | .4 | 0 | 6.9 | 141 | 15.9 | 7246 | 82.8 | 1.1 | | | 3.10 | |
| 0848 | .4 | 0.09 | 6.9 | 138 | 16.4 | 9650 | 99 | 1.3 | | | 3.11 | |
| 0850 | Collect Sample | | | | | | | | | | | |

Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|----------|-----------|--|--|--|--|--|--|--|--|--|--|--|
| 2xSVOC's | 1xD.MERC. | | | | | | | | | | | |
|----------|-----------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 L/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Brown turbidity / slight H₂S odor

FIELD EQUIPMENT

pH Meter HYDROLABTemperature Meter HYDROLABTurbidity Meter HYDROLABSpec. Elec. Cond. Meter HYDROLABORP Meter HYDROLABD.O. Meter HYDROLABInterface Probe SOLINSTPID/OVA MINI-RAEPump GEO-PUMPFilter Apparatus GEO-45 MICRONSerial Number #R10797Serial Number #R10797Serial Number #R10797Serial Number #R10797Serial Number #R10797Serial Number #R10797Serial Number #25582Serial Number #00320Serial Number BA0041Number of Bottles 2x1LA1x250mLPField Notebook Pg. 78Sample Method Low FlowDischarge Water Containerized ☒ Yes ☐ No



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | |
|---------------------------------------|---|---|
| Well Name <u>W1-23</u> | Screen Interval <u>n/a</u> | Station Elevation <u>GND</u> TOC <u>Immiscible Phases Present</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>5.60/0934</u> <u>5.60/0935</u> <u>5.60/0936</u> | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>5.66</u> | |
| Well Location <u>Moffett- Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>Opp</u> |
| Sample Date <u></u> | Reference Elevation <u></u> | PID Reading (TOC) <u>Opp</u> |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation <u></u> | Notes <u></u> |
| <u>M. RAMOS</u> | Well Depth MEAS <u>5.75</u> RPTD <u>6.0</u> | Feet of Water <u></u> |
| Sample ID <u>86-S1-099</u> | Depth of Bottom of Tubing <u>5.85</u> | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>5.60</u> | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading | | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|-----------------|-------|----------------------------------|----------|
| | | | | | | | | | Location | Value | | |
| 1415 | 0.31 | 0.63 | 7.1 | 171 | 28.2 | 16.4 | 1000+ | 0.1 | | | 5.65 | |
| 1418 | 0.3 | 0.21 | 7.1 | 151 | 26.9 | 19.5 | 826 | 0.2 | | | 5.76 | |
| 1421 | Trench Ran dry | | | | | | | 0.25 | | | 5.84 | |
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Notes:

- Purge rate = 0.2 - 0.5 L/minute
- Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SvOCs | D.MERC. | | | | | | | | | | | |
|-------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
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Notes:

- Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
- Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Brown/turbid water - slight H₂S odor

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Number of Bottles <u>2X1LA</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | <u>1X250mLP</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Field Notebook <u>Pg 76</u> |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | Sample Method <u>Low Flow</u> |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |



TETRA TECH FW, INC.

LOW-FLOW GROUNDWATER
SAMPLING DATA SHEETPage 1 of 1Date 3/7/05

| | | | |
|---------------------------------------|---|------------------------------------|---|
| Well Name <u>W1-24</u> | Screen Interval <u>6-18</u> | Station Elevation <u>GND</u> TOC | Immiscible Phases Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Project <u>CTO 86-Site 1, R8/05</u> | Static Water Level (from TOC) / Time <u>6.37/0954</u> <u>6.38/0955</u> <u>6.39/0956</u> | | |
| Project No. <u>1990.086E</u> | Average Water Level (from TOC) <u>6.38</u> | | |
| Well Location <u>Moffett-Site 1</u> | Reference Point <u>TOC</u> | PID Readings (background) <u>0</u> | |
| Sample Date <u>3/8/05</u> | Reference Elevation | PID Reading (TOC) <u>0</u> | |
| Sampling Personnel <u>D. HARRISON</u> | Static Elevation | Notes | |
| <u>M. RAMOS</u> | Well Depth MEAS <u>20.28</u> RPTD | Feet of Water | |
| Sample ID <u>86-S1-106</u> | Depth of Bottom of Tubing <u>11</u> | | |
| Duplicate ID <u>N/A</u> | Depth to Water (w/ Tubing in Well) <u>6.38</u> | | |

PURGING

| Time | Discharge Rate ¹ (L/min) | Dissolved Oxygen (mg/L) | pH | Eh/ORP (mV) | Temp. (°C) | Specific Conduct. (µmhos/cm at °C) | Turbidity (NTU) | Cumulative Volume of Water Removed/Purged (Gallons) | PID/OVA Reading Location | Value | Depth to Water ² (ft) | Comments |
|------|-------------------------------------|-------------------------|-----|-------------|------------|------------------------------------|-----------------|---|--------------------------|-------|----------------------------------|----------|
| 1500 | .4 | 0.30 | 7.0 | 131 | 26.9 | 2460 | 4.5 | .1 | | | 6.40 | |
| 1503 | .4 | 0.76 | 6.8 | 119 | 26.7 | 5270 | 3.2 | .3 | | | 6.42 | |
| 1504 | .4 | 2.22 | 6.8 | 110 | 25.1 | 7553 | 2.9 | .5 | | | 6.43 | |
| 1509 | .4 | 1.30 | 6.8 | 116 | 25.0 | 8760 | 5.6 | .7 | | | 6.45 | |
| 1512 | .4 | 0.32 | 6.8 | 117 | 24.7 | 10238 | 4.6 | .9 | | | 6.46 | |
| 1515 | .4 | 0.30 | 6.8 | 120 | 24.2 | 10377 | 5.0 | 1.1 | | | 6.49 | |
| 1518 | .4 | 0.28 | 6.8 | 121 | 24.1 | 10480 | 2.5 | 1.3 | | | 6.50 | |
| 1520 | Collected Sample | | | | | | | | | | | |
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Notes:

1. Purge rate = 0.2 - 0.5 L/minute
2. Drawdown shall be <0.33 foot

SAMPLE PARAMETERS

| | | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|
| SVOC's | D.MERC. | | | | | | | | | | | |
|--------|---------|--|--|--|--|--|--|--|--|--|--|--|

SAMPLE RATE

| | | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|
| .4 L/min | .4 L/min | | | | | | | | | | | |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|

Notes:

1. Sample rate for VOCs analysis = 0.1 - 0.2 L/minute
2. Sample rate for non-VOCs analysis = purge rate = 0.2 - 0.5 L/minute

Condition of Well: GoodRemarks: Green turbidity / Slight H₂S odor

FIELD EQUIPMENT

| | | |
|---|------------------------------|---|
| pH Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Number of Bottles <u>2x1LA</u> |
| Temperature Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | <u>2x250mLP</u> |
| Turbidity Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Spec. Elec. Cond. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| ORP Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | Field Notebook |
| D.O. Meter <u>HYDROLAB</u> | Serial Number <u>#R10797</u> | |
| Interface Probe <u>SOLINST</u> | Serial Number <u>#25582</u> | Sample Method <u>Low Flow</u> |
| PID/OVA <u>MINI-RAE</u> | Serial Number <u>#00320</u> | |
| Pump <u>GEO-PUMP</u> | Serial Number <u>BA0041</u> | |
| Filter Apparatus <u>GEO-45 MICRON</u> | | Discharge Water Containerized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

APPENDIX B

**ANALYTICAL SUMMARY TABLES
AND STATISTICAL EVALUATION TABLES**

LIST OF APPENDIX B TABLES

Semiannual Sampling

Table B-1 April 2005 Validated Analytical Results, Site 1 Landfill

Table B-2 October 2005 Validated Analytical Results, Site 1 Landfill

Supplemental Sampling

Table B-3 January 2005 Analytical Results for Dissolved Mercury and Semivolatile Organic Compounds, Site 1

Table B-4 March 2005 Analytical Results for Dissolved Mercury and Semivolatile Organic Compounds, Site 1

Statistical Evaluation

Table B-5 Statistical Evaluation Summary – Dissolved Metals

Table B-6 Statistical Evaluation Summary – Pesticides

SEMIANNUAL SAMPLING

TABLE B-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
APRIL 2005 VALIDATED ANALYTICAL RESULTS, SITE 1 LANDFILL
FORMER NAS MOFFETT FIELD**

| MP | 86-S1-108 W1-1R 4/11/05 | 86-S1-109 W1-15 4/11/05 | 86-S1-110 W1-19 4/11/05 | 86-S1-112 W1-14 4/11/05 | 86-S1-113 W1-12R 4/12/05 | 86-S1-114 W1-12R (DUP) 4/12/05 | 86-S1-115 W1-22 ^a 4/12/05 | 86-S1-116 W1-5 4/12/05 | 86-S1-117 W1-8 4/12/05 | 86-S1-118 W1-8 (DUP) 4/12/05 | 86-S1-119 W1-24 4/13/05 | 86-S1-120 W1-16 4/13/05 |
|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------------|--|------------------------------|------------------------------|------------------------------------|-------------------------------|-------------------------------|
| Dissolved Metals (µg/L) EPA Method 200.8 | | | | | | | | | | | | |
| Arsenic | 0.834 J | 4.61 J | 2.2 J | 4.54 J | 1.55 J | 1.63 J | 2.76 J | 1.05 J | 2.09 J | 1.77 J | 6.35 J | 5.43 J |
| Barium | 73.3 | 145 J | 83.8 | 184 | 74.3 | 73.4 J | 208 | 507 | 130 | 130 J | 218 | 244 |
| Cobalt | 13.5 | 1.91 J | 9.93 | 6.01 | 4.67 | 6.37 | 4.33 | 1.28 | 2.74 | 2.4 J | 6.29 | 4.99 |
| Copper | 0.602 J | 0.205 J | 0.814 J | 0.225 J | 0.528 J | 0.573 J | 0.831 J | 0.142 J | 0.329 J | 0.434 J | 0.243 J | 0.214 J |
| VOCs (µg/L) EPA Method 8260B | | | | | | | | | | | | |
| m,p-Xylene | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Vinyl chloride | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Pesticides (µg/L) EPA Method 8081A | | | | | | | | | | | | |
| beta-BHC | 0.047 U | 0.048 U | 0.047 U | 0.047 U | 0.053 U | 0.047 U | 0.047 U | 0.047 U | 0.048 U | 0.047 U | 0.048 U | 0.048 U |
| Heptachlor | 0.047 U | 0.048 U | 0.047 U | 0.047 U | 0.053 U | 0.047 U | 0.047 U | 1.2 | 0.048 U | 0.047 U | 0.048 U | 0.048 U |
| SVOCs (µg/L) EPA Method 8270C | | | | | | | | | | | | |
| 2,4,6-Trichlorophenol | 9.4 U | 9.4 U | 9.5 U | 9.4 U | 9.4 U | 9.7 U | 9.4 U | 9.5 U | 9.5 U | 9.4 U | 9.4 U | 9.6 U |
| 2-Methylphenol | 9.4 U | 9.4 U | 9.5 U | 9.4 U | 9.4 U | 9.7 U | 9.4 U | 9.5 U | 9.5 U | 9.4 U | 9.4 U | 9.6 U |

Notes:

Shading indicates concentration above the calculated concentration limit.

^a – Well W1-22 is a collection trench well and not representative of groundwater at Site 1**Abbreviations and Acronyms:**

µg/L – micrograms per liter

BHC – benzene hexachloride

DUP – duplicate sample

EPA – United States Environmental Protection Agency

J – estimated value

MP – monitoring parameter

NAS – Naval Air Station

SVOC – semivolatile organic compound

U – analyte not detected above project reporting limit

VOC – volatile organic compound

TABLE B-2

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
OCTOBER 2005 VALIDATED ANALYTICAL RESULTS, SITE 1 LANDFILL
FORMER NAS MOFFETT FIELD**

| MP | 86-S1-124 W1-1R 10/4/05 | 86-S1-125 W1-15 10/4/05 | 86-S1-126 W1-19 10/6/05 | 86-S1-128 W1-14 10/6/05 | 86-S1-129 W1-12R 10/6/05 | 86-S1-130 W1-22 ^a 10/6/05 | 86-S1-131 W1-5 10/6/05 | 86-S1-132 W1-5 (DUP) 10/6/05 | 86-S1-133 W1-8 10/6/05 | 86-S1-134 W1-8 (DUP) 10/6/05 | 86-S1-135 W1-24 10/6/05 | 86-S1-136 W1-16 10/6/05 |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--|------------------------------|------------------------------------|------------------------------|------------------------------------|-------------------------------|-------------------------------|
| Dissolved Metals (µg/L) EPA Method 200.8 | | | | | | | | | | | | |
| Arsenic | 1.61 | 4.47 | 2.97 | 5.28 | 2.53 | 1.93 | 0.95 | 1.95 J | 3.86 | 4.33 J | 7.25 | 7.72 |
| Barium | 107 | 176 | 99.9 | 159 | 72 | 1260 | 576 | 556 J | 150 | 150 J | 398 | 458 |
| Cobalt | 7.69 J | 3.32 J | 9.69 J | 8.34 J | 5.25 J | 0.36 J | 1.73 J | 2.99 J | 2.27 J | 2.28 J | 2.87 J | 7.28 J |
| Copper | 2.64 J | 0.1 J | 0.494 J | 0.075 J | 0.205 J | 0.135 J | 0.031 J | 0.06 J | 0.099 J | 0.093 J | 0.14 J | 0.125 J |
| VOCs (µg/L) EPA Method 8260B | | | | | | | | | | | | |
| m,p-Xylene | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Vinyl chloride | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Pesticides (µg/L) EPA Method 8081A | | | | | | | | | | | | |
| beta-BHC | 0.048 U | 0.048 U | 0.047 U | 0.047 U | 0.049 U | 0.25 | 0.05 U | 0.048 U | 0.048 U | 0.047 U | 0.05 U | 0.049 U |
| Heptachlor | 0.048 U | 0.048 U | 0.047 U | 0.047 U | 0.02 J | 0.049 U | 0.05 U | 0.048 U | 0.048 U | 0.047 U | 0.05 U | 0.049 U |
| SVOCs (µg/L) EPA Method 8270C | | | | | | | | | | | | |
| 2,4,6-Trichlorophenol | 9.4 U | 9.4 U | 10 U | 9.5 U | 9.4 U | 10 U | 9.4 U | 10 U | 9.4 U | 9.7 U | 9.4 U | 9.5 U |
| 2-Methylphenol | 9.4 U | 9.4 U | 10 U | 9.5 U | 9.4 U | 10 U | 9.4 U | 10 U | 9.4 U | 9.7 U | 9.4 U | 9.5 U |

Notes:

Shading indicates concentration above the calculated concentration limit.

^a – Well W1-22 is a collection trench well and not representative of groundwater at Site 1**Abbreviations and Acronyms:**

µg/L – micrograms per liter
 BHC – benzene hexachloride
 DUP – duplicate sample
 EPA – United States Environmental Protection Agency
 J – estimated value
 MP – monitoring parameter
 NAS – Naval Air Station
 SVOC – semivolatile organic compound
 U – analyte not detected above project reporting limit
 VOC – volatile organic compound

SUPPLEMENTAL SAMPLING

TABLE B-3

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
JANUARY 2005 ANALYTICAL RESULTS FOR DISSOLVED MERCURY AND SEMIVOLATILE ORGANIC COMPOUNDS, SITE 1
FORMER NAS MOFFETT FIELD

| COC | 86-S1-084 W1-1R 1/31/05 | 86-S1-085 W1-15 2/1/05 | 86-S1-086 W1-19 2/1/05 | 86-S1-088 W1-14 2/1/05 | 86-S1-089 W1-12R 2/1/05 | 86-S1-090 W W1-12R (DUP) 2/1/05 | 86-S1-091 W1-22 ^a 2/2/05 | 86-S1-092 W1-5 2/2/05 | 86-S1-093 W1-8 2/2/05 | 86-S1-094 W1-24 2/2/05 | 86-S1-095 W1-16 2/2/05 |
|--|-------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|---------------------------------------|---|-----------------------------|-----------------------------|------------------------------|------------------------------|
| <i>Dissolved Metals (µg/L) EPA Method 7470A</i> | | | | | | | | | | | |
| Mercury | 8 U | 8 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| <i>SVOCs (µg/L) EPA Method 8270C</i> | | | | | | | | | | | |
| 1,1'-Biphenyl | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,2'-Oxybis(1-chloropropane) | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4,5-Trichlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4,6-Trichlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4-Dichlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4-Dimethylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4-Dinitrophenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2,4-Dinitrotoluene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2,6-Dinitrotoluene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2-Chloronaphthalene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Chlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Methylnaphthalene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Methylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Nitroaniline | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2-Nitrophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 3,3'-Dichlorobenzidine | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 3/4-Methylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 3-Nitroaniline | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4,6-Dinitro-2-methylphenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 4-Bromophenyl-phenylether | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 4-Chloro-3-methylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Chloroaniline | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Chlorophenyl-phenylether | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Nitroaniline | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Nitrophenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Acenaphthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Acenaphthylene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Acetophenone | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Anthracene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Atrazine | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |

TABLE B-3

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
JANUARY 2005 ANALYTICAL RESULTS FOR DISSOLVED MERCURY AND SEMIVOLATILE ORGANIC COMPOUNDS, SITE 1
FORMER NAS MOFFETT FIELD

| COC | 86-S1-084 W1-1R 1/31/05 | 86-S1-085 W1-15 2/1/05 | 86-S1-086 W1-19 2/1/05 | 86-S1-088 W1-14 2/1/05 | 86-S1-089 W1-12R 2/1/05 | 86-S1-090 W W1-12R (DUP) 2/1/05 | 86-S1-091 W1-22 ^a 2/2/05 | 86-S1-092 W1-5 2/2/05 | 86-S1-093 W1-8 2/2/05 | 86-S1-094 W1-24 2/2/05 | 86-S1-095 W1-16 2/2/05 |
|----------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|---------------------------------------|---|-----------------------------|-----------------------------|------------------------------|------------------------------|
| Benzaldehyde | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(a)anthracene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(a)pyrene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(b)fluoranthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(g,h,i)perylene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(k)fluoranthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| bis(2-Chloroethoxy)methane | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| bis(2-Chloroethyl)ether | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| bis(2-Ethylhexyl)phthalate | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Butylbenzylphthalate | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Caprolactam | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Carbazole | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Chrysene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Dibenzo(a,h)anthracene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Dibenzofuran | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Diethylphthalate | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Dimethylphthalate | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| di-n-Butylphthalate | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| di-n-Octylphthalate | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Fluoranthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Fluorene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Hexachlorobenzene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Hexachlorocyclopentadiene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Hexachloroethane | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Indeno(1,2,3-cd)pyrene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Isophorone | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Nitrobenzene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| n-Nitroso-di-n-propylamine | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| n-Nitrosodiphenylamine | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Pentachlorophenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Phenanthrene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Phenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Pyrene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |

TABLE B-3

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
JANUARY 2005 ANALYTICAL RESULTS FOR DISSOLVED MERCURY AND SEMIVOLATILE ORGANIC COMPOUNDS, SITE 1
FORMER NAS MOFFETT FIELD**

Notes:

^a – Well W1-22 is a collection trench well not representative of groundwater at Site 1

Abbreviations and Acronyms:

µg/L – micrograms per liter

COC – constituent of concern

DUP – duplicate sample

EPA – United States Environmental Protection Agency

NAS – Naval Air Station

SVOC – semivolatile organic compound

U – analyte not detected above project reporting limit

TABLE B-4

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
MARCH 2005 ANALYTICAL RESULTS FOR DISSOLVED MERCURY AND SEMIVOLATILE ORGANIC COMPOUNDS, SITE 1
FORMER NAS MOFFETT FIELD

| COC | 86-S1-096 W1-1R 3/7/05 | 86-S1-097 W1-15 3/7/05 | 86-S1-098 W1-19 3/7/05 | 86-S1-100 W1-14 3/7/05 | 86-S1-101 W1-12R 3/7/05 | 86-S1-102 W1-22 ^a 3/8/05 | 86-S1-103 W1-5 3/8/05 | 86-S1-104 W1-5 (DUP) 3/8/05 | 86-S1-105 W1-8 3/8/05 | 86-S1-106 W1-24 3/8/05 | 86-S1-107 W1-16 3/8/05 |
|---------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|---|-----------------------------|-----------------------------------|-----------------------------|------------------------------|------------------------------|
| <i>Dissolved Metals (µg/L)</i> | <i>EPA Method 7470A</i> | | | | | | | | | | |
| Mercury | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U |
| <i>SVOCs (µg/L)</i> | <i>EPA Method 8270C</i> | | | | | | | | | | |
| 1,1'-Biphenyl | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,2'-Oxybis(1-chloropropane) | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4,5-Trichlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4,6-Trichlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4-Dichlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4-Dimethylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2,4-Dinitrophenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2,4-Dinitrotoluene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2,6-Dinitrotoluene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2-Chloronaphthalene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Chlorophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Methylnaphthalene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Methylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 2-Nitroaniline | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 2-Nitrophenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 3,3'-Dichlorobenzidine | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 UJ | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 3/4-Methylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 3-Nitroaniline | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4,6-Dinitro-2-methylphenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 4-Bromophenyl-phenylether | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| 4-Chloro-3-methylphenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Chloroaniline | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Chlorophenyl-phenylether | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Nitroaniline | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| 4-Nitrophenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Acenaphthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Acenaphthylene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Acetophenone | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Anthracene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Atrazine | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |

TABLE B-4

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
MARCH 2005 ANALYTICAL RESULTS FOR DISSOLVED MERCURY AND SEMIVOLATILE ORGANIC COMPOUNDS, SITE 1
FORMER NAS MOFFETT FIELD

| COC | 86-S1-096 W1-1R 3/7/05 | 86-S1-097 W1-15 3/7/05 | 86-S1-098 W1-19 3/7/05 | 86-S1-100 W1-14 3/7/05 | 86-S1-101 W1-12R 3/7/05 | 86-S1-102 W1-22 ^a 3/8/05 | 86-S1-103 W1-5 3/8/05 | 86-S1-104 W1-5 (DUP) 3/8/05 | 86-S1-105 W1-8 3/8/05 | 86-S1-106 W1-24 3/8/05 | 86-S1-107 W1-16 3/8/05 |
|----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|---|-----------------------------|-----------------------------------|-----------------------------|------------------------------|------------------------------|
| Benzaldehyde | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(a)anthracene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 UJ | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(a)pyrene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(b)fluoranthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(g,h,i)perylene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Benzo(k)fluoranthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| bis(2-Chloroethoxy)methane | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| bis(2-Chloroethyl)ether | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| bis(2-Ethylhexyl)phthalate | 19 U | 19 U | 19 U | 19 U | 19 U | 19 UJ | 19 U | 19 U | 19 U | 19 U | 19 U |
| Butylbenzylphthalate | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 UJ | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Caprolactam | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Carbazole | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Chrysene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 UJ | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Dibenzo(a,h)anthracene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Dibenzofuran | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Diethylphthalate | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Dimethylphthalate | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| di-n-Butylphthalate | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| di-n-Octylphthalate | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Fluoranthene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Fluorene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Hexachlorobenzene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Hexachlorocyclopentadiene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Hexachloroethane | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Indeno(1,2,3-cd)pyrene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Isophorone | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Nitrobenzene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| n-Nitroso-di-n-propylamine | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| n-Nitrosodiphenylamine | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Pentachlorophenol | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Phenanthrene | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| Phenol | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |
| Pyrene | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.5 U | 9.7 UJ | 9.4 U | 9.4 U | 9.4 U | 9.4 U | 9.4 U |

TABLE B-4

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
MARCH 2005 ANALYTICAL RESULTS FOR DISSOLVED MERCURY AND SEMIVOLATILE ORGANIC COMPOUNDS, SITE 1
FORMER NAS MOFFETT FIELD**

Notes:

^a – Well W1-22 is a collection trench well not representative of groundwater at Site 1

Abbreviations and Acronyms:

µg/L – micrograms per liter

COC – constituent of concern

DUP – duplicate sample

EPA – United States Environmental Protection Agency

NAS – Naval Air Station

SVOC – semivolatile organic compound

U – analyte not detected above project reporting limit

UJ – analyte not detected above the estimated reporting limit

STATISTICAL EVALUATION

TABLE B-5

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
STATISTICAL EVALUATION SUMMARY - DISSOLVED METALS
APRIL 2005 MONITORING SUMMARY
FORMER NAS MOFFETT FIELD**

| Date | Sample Type | Well | Gradient | Analyte | Conc. (µg/L) | CCL (µg/L) | Less Than Historical Background | Maximum Historical Background | Track for 2 Out of 3 Exceed. | Comment |
|----------|-------------|--------|----------|---------|--------------|------------|---------------------------------|-------------------------------|------------------------------|---------------------------------|
| 04/12/05 | REG | W1-5 | Upgrad. | Barium | 507 | 40 | N/A | N/A | No | Location is a background well |
| 04/12/05 | REG | W1-8 | Upgrad. | Barium | 130 | 40 | N/A | N/A | No | Location is a background well |
| 04/12/05 | FD | W1-8 | Upgrad. | Barium | 130 J | 40 | N/A | N/A | No | Location is a background well |
| 04/12/05 | REG | W1-12R | Upgrad. | Barium | 74.3 | 40 | N/A | N/A | No | Location is a background well |
| 04/12/05 | FD | W1-12R | Upgrad. | Barium | 73.4 J | 40 | N/A | N/A | No | Location is a background well |
| 04/11/05 | REG | W1-14 | Downgrd. | Barium | 184 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 04/11/05 | REG | W1-15 | Downgrd. | Barium | 145 J | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 04/13/05 | REG | W1-16 | Downgrd. | Barium | 244 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 04/11/05 | REG | W1-19 | Downgrd. | Barium | 83.8 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 04/11/05 | REG | W1-1R | Downgrd. | Barium | 73.3 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 04/13/05 | REG | W1-24 | Downgrd. | Barium | 218 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |

TABLE B-5

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
STATISTICAL EVALUATION SUMMARY - DISSOLVED METALS
OCTOBER 2005 MONITORING SUMMARY
FORMER NAS MOFFETT FIELD**

| Date | Sample Type | Well | Gradient | Analyte | Conc. (µg/L) | CCL (µg/L) | Less Than Historical Background | Maximum Historical Background | Track for 2 Out of 3 Exceed. | Comment |
|----------|-------------|--------|----------|---------|--------------|------------|---------------------------------|-------------------------------|------------------------------|---------------------------------|
| 10/06/05 | REG | W1-5 | Upgrad. | Barium | 576 | 40 | N/A | N/A | No | Location is a background well |
| 10/06/05 | FD | W1-5 | Upgrad. | Barium | 556 J | 40 | N/A | N/A | No | Location is a background well |
| 10/06/05 | REG | W1-8 | Upgrad. | Barium | 150 | 40 | N/A | N/A | No | Location is a background well |
| 10/06/05 | FD | W1-8 | Upgrad. | Barium | 150 J | 40 | N/A | N/A | No | Location is a background well |
| 10/06/05 | REG | W1-12R | Upgrad. | Barium | 72 | 40 | N/A | N/A | No | Location is a background well |
| 10/06/05 | REG | W1-14 | Downgrd. | Barium | 159 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 10/04/05 | REG | W1-15 | Downgrd. | Barium | 176 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 10/06/05 | REG | W1-16 | Downgrd. | Barium | 458 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 10/06/05 | REG | W1-19 | Downgrd. | Barium | 99.9 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 10/04/05 | REG | W1-1R | Downgrd. | Barium | 107 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |
| 10/06/05 | REG | W1-24 | Downgrd. | Barium | 398 | 40 | Yes | W1-5 693 µg/L 7/16/03 | No | Less than historical background |

Abbreviations and Acronyms:

µg/L - micrograms per liter
CCL - calculated concentration limit
Conc. - concentration
Downgrd. - downgradient

Exceed. - exceedance
FD - field duplicate
J - estimated value
N/A - not applicable

NAS - Naval Air Station
Upgrad. - upgradient
REG - regular sample

TABLE B-6

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
STATISTICAL EVALUATION SUMMARY - PESTICIDES
APRIL 2005 MONITORING SUMMARY
FORMER NAS MOFFETT FIELD**

| Date | Sample Type | Well | Gradient | Analyte | Conc. (µg/L) | CCL (µg/L) | Less Than Historical Background | Maximum Historical Background | Track for 2 Out of 3 Exceed. | Comment |
|-----------|-------------|------|----------|------------|-----------------|---------------|---------------------------------------|-------------------------------------|------------------------------------|-------------------------------|
| 4/12/2005 | REG | W1-5 | Upgrad. | Heptachlor | 1.2 | 0.36 | N/A | N/A | No | Location is a background well |

TABLE B-6

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
STATISTICAL EVALUATION SUMMARY - PESTICIDES
OCTOBER 2005 MONITORING SUMMARY
FORMER NAS MOFFETT FIELD**

| Date | Sample Type | Well | Gradient | Analyte | Conc. (µg/L) | CCL (µg/L) | Less Than Historical Background | Maximum Historical Background | Track for 2 Out of 3 Exceed. | Comment |
|------|-------------|------|----------|-------------------------|-----------------|---------------|---------------------------------------|-------------------------------------|------------------------------------|---------|
| | | | | No exceedances reported | | | | | | |

Abbreviations and Acronyms:

µg/L - micrograms per liter
CCL - calculated concentration limit
Conc. - concentration
Upgrad. - upgradient
Exceed. - exceedance
N/A - not applicable
NAS - Naval Air Station
REG - regular sample

APPENDIX C
ANALYTICAL DATA VALIDATION PACKAGES
(Provided on CD only)



NUMBER 10345

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

0016653-1N



LABORATORIES, INC.

1835 W. 205th Street

Torrance, CA 90501

Tel: (310) 618-8889

Fax: (310) 618-0818

Date: 03-03-2005

EMAX Batch No.: 058011

Attn: Lynn Jefferson

Tetra Tech FW, Inc.

1940 E Deere Ave, Suite 200

Santa Ana CA 92705

Subject: Laboratory Report

Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on
02/02/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|--------------|-----------|----------|--------|--|
| 86-S1-084 | B011-01 | 01/31/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-085 | B011-02 | 02/01/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-085MS | B011-02M | 02/01/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-085MSD | B011-02S | 02/01/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Kam Y. Pang, Ph.D.

Laboratory Director

13 235A

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05B011

SW 3520C/8270C SEMI VOLATILE ORGANICS BY GC/MS

Two (2) water samples were received on 02/02/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample B011-02 was spiked. All recoveries were within QC limit except:

| Sample | Compound | %Rec. | QC Limit |
|-----------|----------------|-------|----------|
| B0111-02S | 2-Chlorophenol | 38 | 41-125 |

But recovery in MS met QC criteria. RPD was 1% higher than QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

```

=====
Client       : TETRA TECH FW, INC.      Date Collected: 01/31/05
Project      : MFA, SITE 1, CTO 86     Date Received: 02/02/05
Batch No.    : 05B011                  Date Extracted: 02/07/05 17:00
Sample ID    : 86-S1-084               Date Analyzed: 02/14/05 19:42
Lab Samp ID  : B011-01                 Dilution Factor: .94
Lab File ID  : RBH162                  Matrix       : WATER
Ext Btch ID  : SVB006W                 % Moisture    : NA
Calib. Ref.  : RBH022                  Instrument ID : T-041
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 69 | 25-134 |
| 2-FLUOROBIPHENYL | 48 | 43-125 |
| 2-FLUOROPHENOL | 40 | 25-125 |
| NITROBENZENE-D5 | 43 | 32-125 |
| PHENOL-D5 | 47 | 25-125 |
| TERPHENYL-D14 | 90 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 02/01/05
Project      : MFA, SITE 1, CTO 86     Date Received: 02/02/05
Batch No.    : 05B011                  Date Extracted: 02/07/05 17:00
Sample ID    : 86-S1-085               Date Analyzed: 02/14/05 20:10
Lab Samp ID  : B011-02                 Dilution Factor: .94
Lab File ID  : RBH163                  Matrix       : WATER
Ext Btch ID  : SVB006W                 % Moisture   : NA
Calib. Ref.  : RBH022                  Instrument ID : T-041
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 70 | 25-134 |
| 2-FLUOROBIPHENYL | 63 | 43-125 |
| 2-FLUOROPHENOL | 54 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-125 |
| PHENOL-D5 | 63 | 25-125 |
| TERPHENYL-D14 | 83 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05B011

METHOD 7470A DISSOLVED MERCURY BY COLD VAPOR

Two (2) water samples were received on 02/02/05 for Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample B011-02 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

Sample B011-02 was spiked. Recoveries were out of QC limit.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

Samples were reported from DF 40 due to matrix interference.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05B011

Matrix : WATER
Instrument ID : T1047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|--------------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGB020WB | ND | 1 | NA | .2 | .1 | 02/23/0516:18 | 02/23/0513:00 | M478020010 | M478020008 | HGB020W | NA | 02/23/05 |
| LCS1W | HGB020WL | 4.87 | 1 | NA | .2 | .1 | 02/23/0516:20 | 02/23/0513:00 | M478020011 | M478020008 | HGB020W | NA | 02/23/05 |
| LCD1W | HGB020WC | 4.94 | 1 | NA | .2 | .1 | 02/23/0516:22 | 02/23/0513:00 | M478020012 | M478020008 | HGB020W | NA | 02/23/05 |
| 86-S1-085AS | B011-02A | 76.4 | 40 | NA | 8 | 4 | 02/23/0518:03 | 02/23/0513:00 | M478020047 | M478020044 | HGB020W | 02/01/05 | 02/02/05 |
| 86-S1-085 | B011-02 | ND | 40 | NA | 8 | 4 | 02/23/0518:05 | 02/23/0513:00 | M478020048 | M478020044 | HGB020W | 02/01/05 | 02/02/05 |
| 86-S1-085DL | B011-02T | ND | 200 | NA | 40 | 20 | 02/23/0518:07 | 02/23/0513:00 | M478020049 | M478020044 | HGB020W | 02/01/05 | 02/02/05 |
| 86-S1-085MS | B011-02M | 6.52J | 40 | NA | 8 | 4 | 02/23/0518:09 | 02/23/0513:00 | M478020050 | M478020044 | HGB020W | 02/01/05 | 02/02/05 |
| 86-S1-085MSD | B011-02S | 7.92J | 40 | NA | 8 | 4 | 02/23/0518:11 | 02/23/0513:00 | M478020051 | M478020044 | HGB020W | 02/01/05 | 02/02/05 |
| 86-S1-084 | B011-01 | ND | 40 | NA | 8 | 4 | 02/23/0518:14 | 02/23/0513:00 | M478020052 | M478020044 | HGB020W | 01/31/05 | 02/02/05 |

RL: Reporting Limit

7003

COPY

LDC Report# 13235A2

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86
Collection Date: January 31 through February 1, 2005
LDC Report Date: March 14, 2005
Matrix: Water
Parameters: Semivolatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05B011

Sample Identification

86-S1-084**
86-S1-085
86-S1-085MS
86-S1-085MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Compound | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|-------------------------------------|----------------|---------------------|----------------------|------------------|---|--------|
| 86-S1-085MS/MSD (86-S1-085) | 2-Chlorophenol | - | 38 (41-125) | 38 (≤ 30) | J (all detects) UJ (all non-detects) | A |

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05B011

| SDG | Sample | Compound | Flag | A or P | Reason |
|--------|-----------|----------------|---|--------|---|
| 05B011 | 86-S1-085 | 2-Chlorophenol | J (all detects) UJ (all non-detects) | A | Matrix spike/Matrix spike duplicates (%R)(RPD) |

Moffett Airfield, Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05B011

No Sample Data Qualified in this SDG

COPY

LDC Report# 13235A4

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86
Collection Date: January 31 through February 1, 2005
LDC Report Date: March 10, 2005
Matrix: Water
Parameters: Dissolved Mercury
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 05B011

Sample Identification

86-S1-084**
86-S1-085
86-S1-085MS
86-S1-085MSD

**Indicates sample underwent EPA Level IV review

✓
10/13/05

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP interference check sample analysis is not required by the method.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|---|-------------------|---------------------|----------------------|-----------------|-----------------|--------|
| 86-S1-085MS/MSD (All samples in SDG 05B011) | Dissolved mercury | 130 (75-125) | 158 (70-125) | - | J (all detects) | A |

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not required by the method.

XI. Sample Result Verification

All sample result verifications met validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86

Dissolved Mercury - Data Qualification Summary - SDG 05B011

| SDG | Sample | Analyte | Flag | A or P | Reason |
|--------|--------------------------|-------------------|-----------------|--------|--|
| 05B011 | 86-S1-084** 86-S1-085 | Dissolved mercury | J (all detects) | A | Matrix spike/Matrix spike duplicates (%R) |

Moffett Airfield, Site 1, CTO 86

Dissolved Mercury - Laboratory Blank Data Qualification Summary - SDG 05B011

No Sample Data Qualified in this SDG



NUMBER 1031

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

0016579-12

13235 C EMAX
LABORATORIES, INC.



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501

Tel: (310) 618-8889

Fax: (310) 618-0818

Date: 02-22-2005

EMAX Batch No.: 058044

Attn: Lynn Jefferson

Tetra Tech FW, Inc.

1940 E Deere Ave, Suite 200

Santa Ana CA 92705

Subject: Laboratory Report

Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on
02/08/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|-------------------------------|
| 86-S1-086 | B044-01 | 02/01/05 | WATER | MERCURY DISSOLVED |
| 86-S1-088 | B044-02 | 02/01/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-089 | B044-03 | 02/01/05 | WATER | MERCURY DISSOLVED |
| 86-S1-090 | B044-04 | 02/01/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours, *Kam Pang*

Kam Pang

Kam Y. Pang, Ph.D.
Laboratory Director

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CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05B044

SW 3520C/8270C SEMI VOLATILE ORGANICS BY GC/MS

Four (4) water samples were received on 02/08/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05B044
Sample ID   : 86-S1-086
Lab Samp ID : B044-01
Lab File ID : RBH174
Ext Btch ID : SVB006W
Calib. Ref.: RBH022
Date Collected: 02/01/05
Date Received: 02/08/05
Date Extracted: 02/08/05 17:00
Date Analyzed: 02/15/05 01:14
Dilution Factor: .94
Matrix      : WATER
% Moisture  : NA
Instrument ID : T-041
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 9.4 |
| 2-CHLORONAPHTHALENE | ND | 19 | 5.6 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 19 | 5.6 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLORANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 4.7 |
| BUTYLBENZYLPHthalate | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHthalate | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHthalate | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHthalate | ND | 19 | 4.7 |
| DIMETHYLPHthalate | ND | 19 | 5.6 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYClopentadiene | ND | 19 | 5.6 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 9.4 | 4.7 |
| PHENANTHRENE | ND | 19 | 9.4 |
| PHENOL | ND | 19 | 5.6 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 2.3 |
| BENZALDEHYDE | ND | 19 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 84 | 25-134 | |
| 2-FLUOROBIPHENYL | 76 | 43-125 | |
| 2-FLUOROPHENOL | 59 | 25-125 | |
| NITROBENZENE-D5 | 70 | 32-125 | |
| PHENOL-D5 | 67 | 25-125 | |
| TERPHENYL-D14 | 105 | 42-126 | |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 02/01/05
Project     : MFA, SITE 1, CTO 86     Date Received: 02/08/05
Batch No.   : 058044                  Date Extracted: 02/08/05 17:00
Sample ID   : 86-S1-088                Date Analyzed: 02/15/05 01:42
Lab Samp ID : B044-02                  Dilution Factor: .94
Lab File ID : RBH175                   Matrix          : WATER
Ext Btch ID : SVB006W                  % Moisture      : NA
Calib. Ref. : RBH022                   Instrument ID   : T-041
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLORO BENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYL PHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYL PHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYL PHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYL PHTHALATE | ND | 19 | 5.6 |
| DIMETHYL PHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLORO BENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 2.3 |
| BENZALDEHYDE | ND | 19 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 76 | 25-134 |
| 2-FLUOROBIPHENYL | 65 | 43-125 |
| 2-FLUOROPHENOL | 48 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-125 |
| PHENOL-D5 | 57 | 25-125 |
| TERPHENYL-D14 | 91 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 058044
Sample ID: 86-S1-089
Lab Samp ID: B044-03
Lab File ID: RBH176
Ext Btch ID: SVB006W
Calib. Ref.: RBH022
Date Collected: 02/01/05
Date Received: 02/08/05
Date Extracted: 02/08/05 17:00
Date Analyzed: 02/15/05 02:10
Dilution Factor: .94
Matrix : WATER
% Moisture : NA
Instrument ID : T-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 9.4 |
| 2-CHLORONAPHTHALENE | ND | 19 | 5.6 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 19 | 5.6 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 9.4 |
| 4-CHLORO-3-METHYLPHENOL | ND | 19 | 6.6 |
| 4-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 19 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 9.4 | 4.7 |
| PHENANTHRENE | ND | 19 | 9.4 |
| PHENOL | ND | 19 | 5.6 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 2.3 |
| BENZALDEHYDE | ND | 19 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 79 | 25-134 | |
| 2-FLUOROBIPHENYL | 69 | 43-125 | |
| 2-FLUOROPHENOL | 54 | 25-125 | |
| NITROBENZENE-D5 | 66 | 32-125 | |
| PHENOL-D5 | 60 | 25-125 | |
| TERPHENYL-D14 | 101 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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Client   : TETRA TECH FW, INC.      Date Collected: 02/01/05
Project  : MFA SITE 1, CTO 86      Date Received: 02/08/05
Batch No.: 05B044                  Date Extracted: 02/08/05 17:00
Sample ID: 86-S1-090               Date Analyzed: 02/15/05 02:37
Lab Samp ID: B044-04               Dilution Factor: .94
Lab File ID: RBH177                Matrix : WATER
Ext Btch ID: SVB006W               % Moisture : NA
Calib. Ref.: RBH022                Instrument ID : T-041
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLORO BENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYL PHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYL PHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYL PHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYL PHTHALATE | ND | 19 | 5.6 |
| DIMETHYL PHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLORO BENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSO-DIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 73 | 25-134 |
| 2-FLUOROBIPHENYL | 59 | 43-125 |
| 2-FLUOROPHENOL | 44 | 25-125 |
| NITROBENZENE-D5 | 57 | 32-125 |
| PHENOL-D5 | 47 | 25-125 |
| TERPHENYL-D14 | 97 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05B044

METHOD 7470A DISSOLVED MERCURY BY COLD VAPOR

Four (4) water samples were received on 02/08/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**
Analysis met holding time criteria.
2. **Method Blank**
Method blank was free of contamination at the reporting limit.
3. **Lab Control Sample/Lab Control Sample Duplicate**
Lab control results were within QC limit.
4. **Serial Dilution / Post-Analytical Spike**
Sample B023-02 from another SDG was analyzed for serial dilution and post-analytical spike. All QC requirements were met.
5. **Duplicate**
Duplicate sample was not designated in this SDG.
6. **Matrix Spike/Matrix Spike Duplicate**
No MS/MSD sample was designated in this SDG.
7. **Sample Analysis**
Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 058044

Matrix : WATER
Instrument ID : 11047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|-----------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGB011WB | ND | 1 | NA | .2 | .1 | 02/11/0515:46 | 02/11/0512:00 | M478013010 | M478013008 | HGB011W | NA | 02/11/05 |
| LCSTW | HGB011WL | 5.3 | 1 | NA | .2 | .1 | 02/11/0515:49 | 02/11/0512:00 | M478013011 | M478013008 | HGB011W | NA | 02/11/05 |
| LCSTW | HGB011WC | 5.21 | 1 | NA | .2 | .1 | 02/11/0515:51 | 02/11/0512:00 | M478013012 | M478013008 | HGB011W | NA | 02/11/05 |
| 86-S1-086 | B044-01 | ND | 1 | NA | .2 | .1 | 02/11/0516:28 | 02/11/0512:00 | M478013029 | M478013020 | HGB011W | 02/01/05 | 02/08/05 |
| 86-S1-088 | B044-02 | ND | 1 | NA | .2 | .1 | 02/11/0516:30 | 02/11/0512:00 | M478013030 | M478013020 | HGB011W | 02/01/05 | 02/08/05 |
| 86-S1-089 | B044-03 | ND | 1 | NA | .2 | .1 | 02/11/0516:32 | 02/11/0512:00 | M478013031 | M478013020 | HGB011W | 02/01/05 | 02/08/05 |
| 86-S1-090 | B044-04 | ND | 1 | NA | .2 | .1 | 02/11/0516:39 | 02/11/0512:00 | M478013034 | M478013032 | HGB011W | 02/01/05 | 02/08/05 |

RL: Reporting Limit

7003

COPY

LDC Report# 13235C2

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86

Collection Date: February 1, 2005

LDC Report Date: March 10, 2005

Matrix: Water

Parameters: Semivolatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05B044

Sample Identification

86-S1-086

86-S1-088

86-S1-089

86-S1-090**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

Cooler temperatures for all samples were reported at 10.4°C upon receipt by the laboratory.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 86-S1-089 and 86-S1-090** were identified as field duplicates. No semivolatiles were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05B044

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05B044

No Sample Data Qualified in this SDG

COPY

LDC Report# 13235C4

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86
Collection Date: February 1, 2005
LDC Report Date: March 10, 2005
Matrix: Water
Parameters: Dissolved Mercury
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 05B044

Sample Identification

86-S1-086
86-S1-088
86-S1-089
86-S1-090**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP interference check sample analysis is not required by the method.

V. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) analyses specified for the samples in this SDG, and therefore matrix spike analyses were not performed for this SDG.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not required by the method.

XI. Sample Result Verification

All sample result verifications met validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

Samples 86-S1-089 and 86-S1-090** were identified as field duplicates. No dissolved mercury was detected in any of the samples.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Dissolved Mercury - Data Qualification Summary - SDG 05B044

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86
Dissolved Mercury - Laboratory Blank Data Qualification Summary - SDG 05B044

No Sample Data Qualified in this SDG



TETRA TECH
1230 Columbia Street, Suite 400
San Diego, CA 92101 (619) 234-8696

CHAIN-OF-CUSTODY RECORD

NUMBER 10317

| | | | | | | | | | | | | | | |
|---|--------|--|-------------------------|-------------------|--|------------------|-------------|--|-------|--|---|----|--|--|
| PROJECT NAME SITE 1 - R7/05 | | PURCHASE ORDER NO. 20848 TASC 28 | | ANALYSES REQUIRED | | | | LABORATORY NAME EMAY | | Project Information Section Do not submit to Laboratory | | | | |
| PROJECT LOCATION MOFFETT FIELD, CA | | PROJECT NO. 1990-0866 | | | | | | LABORATORY ID (FOR LABORATORY) 05B028 | | | | | | |
| SAMPLER NAME Bill Ogles | | AIRBILL NUMBER 845707613540 | | | | | | | | | | | | |
| PROJECT CONTACT LYNN JEFFERSON | | PROJECT CONTACT PHONE NUMBER (949) 758-7588 | | | | | | COMMENTS | | | | | | |
| SAMPLE ID | | DATE COLLECTED | TIME COLLECTED | NO. OF CONTAINER | LEVEL 3 4 | T Y P E | T A T | | | | | | | |
| 86-SI-091 | 2-2-05 | 1330 | 3 | X | W | 10 DAY | | X | W1-22 | - | - | QC | | |
| 86-SI-092 | 2-2-05 | 1415 | 3 | X | W | 10 DAY | | X | W1-5 | - | - | QC | | |
| 86-SI-093 | 2-2-05 | 1500 | 3 | X | W | 10 DAY | | X | W1-8 | - | - | QC | | |
| 86-SI-094 | 2-2-05 | 1515 | 3 | X | W | 10 DAY | | X | W1-24 | - | - | QC | | |
| 86-SI-095 | 2-2-05 | 1630 | 3 | X | W | 10 DAY | | X | W1-16 | - | - | QC | | |
| | | | | | | | | LABORATORY INSTRUCTIONS/COMMENTS NA | | | | | | |
| | | | | | | | | COMPOSITE DESCRIPTION NA | | | | | | |
| | | | | | | | | SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY) TEMPERATURE: _____ SAMPLE CONDITION: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN COOLER SEAL: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN | | | | | | |
| RELINQUISHED BY (Signature) Lynn Jefferson | | DATE 2-3-05 | RECEIVED BY (Signature) | | LABORATORY INSTRUCTIONS/COMMENTS NA | | | | | | | | | |
| COMPANY Tetra Tech | | TIME 1400 | COMPANY 51021 | | | | | | | | | | | |
| RELINQUISHED BY (Signature) | | DATE | RECEIVED BY (Signature) | | | | | | | | | | | |
| COMPANY | | TIME | COMPANY | | | | | | | | | | | |
| RELINQUISHED BY (Signature) | | DATE | RECEIVED BY (Signature) | | | | | | | | | | | |
| COMPANY | | TIME | COMPANY | | | | | | | | | | | |

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

0016574-1N



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

13235B

Date: 02-18-2005
EMAX Batch No.: 05B028

Attn: Lynn Jefferson

Tetra Tech FW, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on
02/04/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|--|
| 86-S1-091 | B028-01 | 02/02/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-092 | B028-02 | 02/02/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-093 | B028-03 | 02/02/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-094 | B028-04 | 02/02/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-095 | B028-05 | 02/02/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05B028

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Five (5) water samples were received on 02/04/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.
Project      : MFA, SITE 1, CTO 86
Batch No.    : 058028
Sample ID    : 86-S1-091
Lab Samp ID  : 6028-01
Lab File ID  : RBH166
Ext Btch ID  : SVB006W
Calib. Ref.  : RBH022
Date Collected: 02/02/05
Date Received: 02/04/05
Date Extracted: 02/07/05 17:00
Date Analyzed: 02/14/05 21:33
Dilution Factor: .94
Matrix       : WATER
% Moisture   : NA
Instrument ID : T-041
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 3-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| DIMETHYLPHTHALATE | ND | 19 | 5.6 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLORO BENZENE | ND | 19 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 5.6 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 2.3 |
| BENZALDEHYDE | ND | 19 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 77 | 25-134 | |
| 2-FLUOROBIPHENYL | 66 | 43-125 | |
| 2-FLUOROPHENOL | 64 | 25-125 | |
| NITROBENZENE-D5 | 70 | 32-125 | |
| PHENOL-D5 | 70 | 25-125 | |
| TERPHENYL-D14 | 104 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 02/02/05
Project     : MFA, SITE 1, CTO 86     Date Received: 02/04/05
Batch No.   : 058028                 Date Extracted: 02/07/05 17:00
Sample ID   : 86-S1-092              Date Analyzed: 02/14/05 22:01
Lab Samp ID : B028-02                Dilution Factor: .94
Lab File ID : RBH167                 Matrix      : WATER
Ext Btch ID : SVB006W                % Moisture   : NA
Calib. Ref. : RBH022                 Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 79 | 25-134 |
| 2-FLUOROBIPHENYL | 59 | 43-125 |
| 2-FLUOROPHENOL | 51 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-125 |
| PHENOL-D5 | 58 | 25-125 |
| TERPHENYL-D14 | 98 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 02/02/05
Project     : MFA, SITE 1, CTO 86      Date Received: 02/04/05
Batch No.   : 05B028                   Date Extracted: 02/07/05 17:00
Sample ID   : 86-S1-093                 Date Analyzed: 02/14/05 22:28
Lab Samp ID : B028-03                    Dilution Factor: .94
Lab File ID : RBH168                      Matrix      : WATER
Ext Btch ID : SVB006W                     % Moisture   : NA
Calib. Ref. : RBH022                     Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLORO BENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | HC | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 19 | 2.3 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 93 | 25-134 | |
| 2-FLUOROBIPHENYL | 67 | 43-125 | |
| 2-FLUOROPHENOL | 59 | 25-125 | |
| NITROBENZENE-D5 | 70 | 32-125 | |
| PHENOL-D5 | 67 | 25-125 | |
| TERPHEHYL-D14 | 106 | 42-126 | |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 02/02/05
Project     : MFA SITE 1, CTO 86      Date Received: 02/04/05
Batch No.   : 05B028                 Date Extracted: 02/07/05 17:00
Sample ID   : 86-S1-094               Date Analyzed: 02/14/05 22:56
Lab Samp ID : B028-04                 Dilution Factor: .94
Lab File ID : RBH169                  Matrix          : WATER
Ext Btch ID : SVB006W                 % Moisture      : NA
Calib. Ref. : RBH022                  Instrument ID   : T-041
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYL BENZYL PHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYL PHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYL PHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYL PHTHALATE | ND | 19 | 5.6 |
| DIMETHYL PHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLORO CYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSO-DIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 78 | 25-134 |
| 2-FLUOROBIPHENYL | 56 | 43-125 |
| 2-FLUOROPHENOL | 57 | 25-125 |
| NITROBENZENE-D5 | 63 | 32-125 |
| PHENOL-D5 | 64 | 25-125 |
| TERPHENYL-D14 | 97 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/B270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05B028
Sample ID: 86-S1-095
Lab Samp ID: B028-05
Lab File ID: RBH170
Ext Btch ID: SVB006W
Calib. Ref.: RBH022

Date Collected: 02/02/05
Date Received: 02/04/05
Date Extracted: 02/07/05 17:00
Date Analyzed: 02/14/05 23:24
Dilution Factor: .94
Matrix : WATER
% Moisture : NA
Instrument ID : T-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 9.4 | 5.6 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 9.4 |
| 4-CHLORO-3-METHYLPHENOL | ND | 19 | 6.6 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 19 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSOBIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 2.3 |
| BENZALDEHYDE | ND | 19 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | GC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 76 | 25-134 | |
| 2-FLUOROBIPHENYL | 52 | 43-125 | |
| 2-FLUOROPHENOL | 42 | 25-125 | |
| NITROBENZENE-D5 | 49 | 32-125 | |
| PHENOL-D5 | 52 | 25-125 | |
| TERPHENYL-D14 | 97 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05B028

**METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR**

Five (5) water samples were received on 02/04/05 for Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution /Analytical Spike

Sample B023-02 from another SDG was analyzed for serial dilution and analytical spike. QC criteria were met.

5. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 058028

Matrix : WATER
Instrument ID : T1047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (UG/L) | DLF | MOIST | RL (UG/L) | MDL (UG/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|-----------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGB011WB | ND | 1 | NA | -2 | .1 | 02/11/0515:46 | 02/11/0512:00 | M478013010 | M478013008 | HGB011W | NA | 02/11/05 |
| LCS1W | HGB011WL | 5.3 | 1 | NA | -2 | .1 | 02/11/0515:49 | 02/11/0512:00 | M478013011 | M478013008 | HGB011W | NA | 02/11/05 |
| LCD1W | HGB011WC | 5.21 | 1 | NA | -2 | .1 | 02/11/0515:51 | 02/11/0512:00 | M478013012 | M478013008 | HGB011W | NA | 02/11/05 |
| 86-S1-091 | 8028-01 | ND | 1 | NA | -2 | .1 | 02/11/0516:41 | 02/11/0512:00 | M478013035 | M478013032 | HGB011W | 02/02/05 | 02/04/05 |
| 86-S1-092 | 8028-02 | ND | 1 | NA | -2 | .1 | 02/11/0516:43 | 02/11/0512:00 | M478013036 | M478013032 | HGB011W | 02/02/05 | 02/04/05 |
| 86-S1-093 | 8028-03 | ND | 1 | NA | -2 | .1 | 02/11/0516:46 | 02/11/0512:00 | M478013037 | M478013032 | HGB011W | 02/02/05 | 02/04/05 |
| 86-S1-094 | 8028-04 | ND | 1 | NA | -2 | .1 | 02/11/0516:48 | 02/11/0512:00 | M478013038 | M478013032 | HGB011W | 02/02/05 | 02/04/05 |
| 86-S1-095 | 8028-05 | ND | 1 | NA | -2 | .1 | 02/11/0516:50 | 02/11/0512:00 | M478013039 | M478013032 | HGB011W | 02/02/05 | 02/04/05 |

RL: Reporting Limit

7003

COPY

LDC Report# 13235B2

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86

Collection Date: February 2, 2005

LDC Report Date: March 10, 2005

Matrix: Water

Parameters: Semivolatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05B028

Sample Identification

86-S1-091

86-S1-092

86-S1-093**

86-S1-094

86-S1-095

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05B028

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05B028

No Sample Data Qualified in this SDG

COPY

LDC Report# 13235B4

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86
Collection Date: February 2, 2005
LDC Report Date: March 10, 2005
Matrix: Water
Parameters: Dissolved Mercury
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05B028

Sample Identification

86-S1-091
86-S1-092
86-S1-093**
86-S1-094
86-S1-095

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP interference check sample analysis is not required by the method.

V. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) analyses specified for the samples in this SDG, and therefore matrix spike analyses were not performed for this SDG.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not required by the method.

XI. Sample Result Verification

All sample result verifications met validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Dissolved Mercury - Data Qualification Summary - SDG 05B028

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86
Dissolved Mercury - Laboratory Blank Data Qualification Summary - SDG 05B028

No Sample Data Qualified in this SDG



TETRA TECH
1230 Columbia Street, Suite 400
San Diego, CA 92101 (619) 234-8696

CHAIN-OF-CUSTODY RECORD

NUMBER 10327

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------|--|-----------------------------------|-------------------|--|-------------|---|--|--|--|--|--|--|---|--------------------------------------|--|-------|--------------------|--|----|--|--|--|
| PROJECT NAME Site 1 Baseline - R8/05 | | PURCHASE ORDER NO. # 20848 - Task 28 | | ANALYSES REQUIRED | | | | | | | | | | LABORATORY NAME CMAA | | Project Information Section Do not submit to Laboratory | | | | | | | |
| PROJECT LOCATION MFA | | PROJECT NO. 1990.086E | | | | | | | | | | | | LABORATORY ID (FOR LABORATORY) DSC073 | | | | | | | | | |
| SAMPLER NAME D. Harrison | | AIRBILL NUMBER 850158348186 | | | | | | | | | | | | COMMENTS Run MS/MSD | | LOCATION W1-1R | | DEPTH START END | | QC | | | |
| PROJECT CONTACT Lynn Jefferson | | PROJECT CONTACT PHONE NUMBER 949/756-7500 | | | | | | | | | | | | | | | | | | | | | |
| SAMPLE ID | DATE COLLECTED | TIME COLLECTED | NO. OF CONTAINER | LEVEL 3 4 | T Y P E | T A T | | | | | | | | | | | W1-1R | | | | | | |
| 86-S1-096 | 3/7/05 | 1035 | 3 | X | W | day | X | | | | | | | | | | | W1-15 | | | | | |
| 86-S1-097 | 3/7/05 | 1130 | 9 | X | W | day | X | | | | | | | | | | | W1-19 | | | | | |
| 86-S1-098 | 3/7/05 | 1240 | 3 | X | W | day | X | | | | | | | | | | | W1-14 | | | | | |
| 86-S1-100 | 3/7/05 | 1340 | 3 | X | W | day | X | | | | | | | | | | | W1-12R | | | | | |
| 86-S1-101 | 3/7/05 | 1500 | 3 | X | W | day | X | | | | | | | | | | | W1-22 | | | | | |
| 86-S1-102 | 3/8/05 | 0850 | 3 | X | W | day | X | | | | | | | | | | | W1-5 | | | | | |
| 86-S1-103 | 3/8/05 | 1007 | 3 | X | W | day | X | | | | | | | | | | | W1-5 | | | | | |
| 86-S1-104 | 3/8/05 | 1015 | 3 | X | W | day | X | | | | | | | | | | | W1-5 | | | | | |
| 86-S1-105 | 3/8/05 | 1055 | 3 | X | W | day | X | | | | | | | | | | | W1-8 | | | | | |
| 2-91/1 | | | | | | | | | | | | | | | | | | DSC/2 | | | | | |
| RELINQUISHED BY (Signature) D. Harrison | DATE 3/8/05 | TIME 1400 | RECEIVED BY (Signature) F. Bex | COMPANY | LABORATORY INSTRUCTIONS/COMMENTS D. mercury samples were +.evl filter | | | | | | | | | | SAMPLING COMMENT: Site 1 R8/05 | | | | | | | | |
| RELINQUISHED BY (Signature) MFA | DATE | TIME | RECEIVED BY (Signature) | COMPANY | COMPOSITE DESCRIPTION | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY (Signature) | DATE | TIME | RECEIVED BY (Signature) | COMPANY | SAMPLE CONDITION UPON RECEIPT FOR LABORATORY TEMPERATURE: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN COOLER SEAL: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY (Signature) | DATE | TIME | RECEIVED BY (Signature) | COMPANY | | | | | | | | | | | | | | | | | | | |



LABORATORIES, INC.

1835 W. 205th Street

Torrance, CA 90501

Tel: (310) 618-8889

Fax: (310) 618-0818

Date: 03-29-2005

EMAX Batch No.: 05C073

Attn: Lynn Jefferson

Tetra Tech FW, Inc.

1940 E Deere Ave, Suite 200

Santa Ana CA 92705

Subject: Laboratory Report

Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on 03/09/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-------------|-----------|----------|--------|-------------------------------|
| 86-S1-096 | C073-01 | 03/07/05 | WATER | MERCURY DISSOLVED |
| 86-S1-097 | C073-02 | 03/07/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-098 | C073-03 | 03/07/05 | WATER | MERCURY DISSOLVED |
| 86-S1-100 | C073-04 | 03/07/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-101 | C073-05 | 03/07/05 | WATER | MERCURY DISSOLVED |
| 86-S1-102 | C073-06 | 03/08/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-103 | C073-07 | 03/08/05 | WATER | MERCURY DISSOLVED |
| 86-S1-104 | C073-08 | 03/08/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-105 | C073-09 | 03/08/05 | WATER | MERCURY DISSOLVED |
| 86-S1-097MS | C073-02M | 03/07/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| | | | | MERCURY DISSOLVED |

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| Sample ID | Control # | Col Date | Matrix | Analysis |
|--------------|-----------|----------|--------|---|
| 86-S1-097MSD | C073-02S | 03/07/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

K. Y. Pang
Kam Y. Pang, Ph.D.
Laboratory Director

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CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05C073

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Nine (9) water samples were received on 03/09/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample C073-02 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 03/07/05
Project     : MFA SITE 1, CTO 86      Date Received: 03/09/05
Batch No.   : 05C073                  Date Extracted: 03/10/05 18:00
Sample ID   : 86-S1-096                Date Analyzed: 03/14/05 16:40
Lab Samp ID : C073-01                  Dilution Factor: .94
Lab File ID : RCH218                    Matrix : WATER
Ext Btch ID : SVC020W                   % Moisture : NA
Calib. Ref. : RBH022                    Instrument ID : T-041
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.5 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 62 | 25-134 |
| 2-FLUOROBIPHENYL | 53 | 43-125 |
| 2-FLUOROPHENOL | 42 | 25-125 |
| NITROBENZENE-D5 | 48 | 35-125 |
| PHENOL-D5 | 49 | 25-125 |
| TERPHEHYL-D14 | 80 | 42-126 |

RL: Reporting Limit

(1): Cannot be separated from 3-Methylphenol

(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

=====
Client : TETRA TECH FW, INC. Date Collected: 03/07/05
Project : MFA, SITE 1, CTO 86 Date Received: 03/09/05
Batch No. : 05C073 Date Extracted: 03/10/05 18:00
Sample ID: 86-S1-097 Date Analyzed: 03/14/05 17:08
Lab Samp ID: C073-02 Dilution Factor: .94
Lab File ID: RCH219 Matrix : WATER
Ext Btch ID: SVC020W % Moisture : NA
Calib. Ref.: RBH022 Instrument ID : 1-Q41
=====

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 9.4 |
| 5-CHLORONAPHTHALENE | ND | 9.4 | 5.6 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 75 | 25-134 |
| 2-FLUOROBIPHENYL | 66 | 43-123 |
| 2-FLUOROPHENOL | 52 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-126 |
| PHENOL-D5 | 56 | 25-125 |
| TERPHENYL-D14 | 89 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

3005

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 03/07/05
Project     : MFA, SITE 1, CTO 86     Date Received: 03/09/05
Batch No.   : 05C073                 Date Extracted: 03/10/05 18:00
Sample ID   : 86-S1-098              Date Analyzed: 03/14/05 18:31
Lab Samp ID : C073-03                Dilution Factor: .94
Lab File ID : RCH222                 Matrix: WATER
Ext Btch ID : SVC020W                % Moisture: NA
Calib. Ref. : RBH022                 Instrument ID: T-041
=====
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 74 | 25-134 |
| 2-FLUOROBIPHENYL | 60 | 43-125 |
| 2-FLUOROPHENOL | 22 | 25-125 |
| NITROBENZENE-D5 | 58 | 36-125 |
| PHENOL-D5 | 56 | 25-125 |
| TERPHENYL-D14 | 83 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC      Date Collected: 03/07/05
Project      : MFA, SITE 1, CTO 86    Date Received: 03/09/05
Batch No.    : 05C073                 Date Extracted: 03/10/05 18:00
Sample ID    : 86-S1-100               Date Analyzed: 03/14/05 18:59
Lab Samp ID  : C073-04                 Dilution Factor: .94
Lab File ID  : RCH223                  Matrix       : WATER
Ext Btch ID  : SVC020W                 % Moisture   : NA
Calib. Ref.  : RBH022                  Instrument ID : T-041
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 19 | 2.5 |
| BENZALDEHYDE | ND | 9.4 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 81 | 25-134 |
| 2-FLUOROBIPHENYL | 67 | 43-125 |
| 2-FLUOROPHENOL | 59 | 25-125 |
| NITROBENZENE-D5 | 67 | 32-125 |
| PHENOL-D5 | 64 | 25-125 |
| TERPHENYL-D14 | 88 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

3007

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.
Project      : MFA, SITE 1, CTO 86
Batch No.    : 050073
Sample ID    : 86-S1-101
Lab Samp ID  : C073-05
Lab File ID  : RCH238
Ext. Btch ID : SVC020W
Calib. Ref.  : RBH022
Date Collected: 03/07/05
Date Received: 03/09/05
Date Extracted: 03/10/05 18:00
Date Analyzed: 03/15/05 13:03
Dilution Factor: .95
Matrix       : WATER
% Moisture   : NA
Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 9.5 | 4.8 |
| 2,4-DINITROPHENOL | ND | 10 | 9.5 |
| 2,4-DINITROTOLUENE | ND | 10 | 9.5 |
| 2,6-DINITROTOLUENE | ND | 10 | 5.7 |
| 2-CHLORONAPHTHALENE | ND | 9.5 | 4.8 |
| 5-CHLOROPHENOL | ND | 9.5 | 4.8 |
| 5-METHYLNAPHTHALENE | ND | 9.5 | 4.8 |
| 5-METHYLPHENOL | ND | 9.5 | 4.8 |
| 2-NITROANILINE | ND | 9.5 | 4.8 |
| 2-NITROPHENOL | ND | 9.5 | 5.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.5 | 4.8 |
| 3-NITROANILINE | ND | 9.5 | 4.8 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 10 | 9.5 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 10 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.5 | 4.8 |
| 4-CHLOROANILINE | ND | 9.5 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 9.5 | 4.8 |
| 4-NITROANILINE | ND | 9.5 | 4.8 |
| 4-NITROPHENOL | ND | 9.5 | 4.8 |
| ACENAPHTHENE | ND | 9.5 | 4.8 |
| ACENAPHTHYLENE | ND | 9.5 | 4.8 |
| ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)PYRENE | ND | 9.5 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.5 | 4.8 |
| BUTYLBENZYLPHTHALATE | ND | 9.5 | 4.8 |
| CHRYSENE | ND | 9.5 | 4.8 |
| DI-N-BUTYLPHTHALATE | ND | 9.5 | 4.8 |
| DI-N-OCTYLPHTHALATE | ND | 9.5 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.5 | 4.8 |
| DIBENZOFURAN | ND | 9.5 | 4.8 |
| DIETHYLPHTHALATE | ND | 10 | 5.7 |
| DIMETHYLPHTHALATE | ND | 10 | 4.8 |
| FLUORANTHENE | ND | 9.5 | 4.8 |
| FLUORENE | ND | 9.5 | 4.8 |
| HEXACHLOROBENZENE | ND | 10 | 5.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.5 | 4.8 |
| HEXACHLOROETHANE | ND | 9.5 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.5 | 4.8 |
| ISOPHORONE | ND | 9.5 | 4.8 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.5 | 4.8 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.5 | 4.8 |
| NITROBENZENE | ND | 9.5 | 4.8 |
| PENTACHLOROPHENOL | ND | 10 | 9.5 |
| PHENANTHRENE | ND | 10 | 5.7 |
| PHENOL | ND | 9.5 | 4.8 |
| PYRENE | ND | 9.5 | 4.8 |
| 1,1'-BIPHENYL | ND | 9.5 | 4.8 |
| ACETOPHENONE | ND | 9.5 | 4.8 |
| ATRAZINE | ND | 10 | 2.4 |
| BENZALDEHYDE | ND | 10 | 9.5 |
| CAPROLACTAM | ND | 9.5 | 4.8 |
| CARBAZOLE | ND | 9.5 | 4.8 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 76 | 25-134 |
| 2-FLUOROBIPHENYL | 67 | 43-125 |
| 2-FLUOROPHENOL | 58 | 25-125 |
| NITROBENZENE-D5 | 64 | 32-125 |
| PHENOL-D5 | 63 | 25-125 |
| TERPHENYL-D14 | 89 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 03/08/05
Project      : MFA, SITE 1, CTO 86     Date Received: 03/09/05
Batch No.    : 05C073                  Date Extracted: 03/10/05 18:00
Sample ID    : 86-S1-102               Date Analyzed: 03/15/05 13:31
Lab Samp ID  : C073-06                 Dilution Factor: .97
Lab File ID  : RCH239                  Matrix         : WATER
Ext Btch ID  : SVC020W                 % Moisture      : NA
Calib. Ref.  : RBH022                  Instrument ID   : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4-DICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4-DIMETHYLPHENOL | ND | 9.7 | 4.9 |
| 2,4-DINITROPHENOL | ND | 19 | 9.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.7 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.8 |
| 2-CHLORONAPHTHALENE | ND | 9.7 | 4.9 |
| 2-CHLOROPHENOL | ND | 9.7 | 4.9 |
| 2-METHYLNAPHTHALENE | ND | 9.7 | 4.9 |
| 2-METHYLPHENOL | ND | 19 | 5.8 |
| 2-NITROANILINE | ND | 9.7 | 4.9 |
| 2-NITROPHENOL | ND | 9.7 | 4.9 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.7 | 4.9 |
| 3-NITROANILINE | ND | 19 | 9.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.8 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.7 | 4.9 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.7 | 4.9 |
| 4-CHLORANILINE | ND | 9.7 | 4.9 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.7 | 4.9 |
| 4-METHYLPHENOL (1) | ND | 9.7 | 4.9 |
| 4-NITROANILINE | ND | 19 | 4.9 |
| 4-NITROPHENOL | ND | 9.7 | 4.9 |
| ACENAPHTHENE | ND | 9.7 | 4.9 |
| ACENAPHTHYLENE | ND | 9.7 | 4.9 |
| ANTHRACENE | ND | 9.7 | 4.9 |
| BENZO(A)ANTHRACENE | ND | 9.7 | 4.9 |
| BENZO(A)PYRENE | ND | 9.7 | 4.9 |
| BENZO(B)FLUORANTHENE | ND | 9.7 | 4.9 |
| BENZO(K)FLUORANTHENE | ND | 9.7 | 4.9 |
| BENZO(G,H,I)PERYLENE | ND | 9.7 | 4.9 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.7 | 4.9 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.7 | 4.9 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.7 | 4.9 |
| BUTYLBENZYLPHthalate | ND | 9.7 | 4.9 |
| CHRYSENE | ND | 9.7 | 4.9 |
| D1-N-BUTYLPHthalate | ND | 9.7 | 4.9 |
| D1-N-OCTYLPHthalate | ND | 9.7 | 4.9 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.7 | 4.9 |
| DIBENZOFURAN | ND | 19 | 5.8 |
| DIETHYLPHthalate | ND | 19 | 4.9 |
| DIMETHYLPHthalate | ND | 9.7 | 4.9 |
| FLUORANTHENE | ND | 19 | 5.8 |
| FLUORENE | ND | 9.7 | 4.9 |
| HEXACHLOROBENZENE | ND | 9.7 | 4.9 |
| HEXACHLOROCYClopentadiene | ND | 9.7 | 4.9 |
| HEXACHLOROETHANE | ND | 9.7 | 4.9 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.7 | 4.9 |
| ISOPHORONE | ND | 9.7 | 4.9 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.7 | 4.9 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.7 | 4.9 |
| NITROBENZENE | ND | 19 | 9.7 |
| PENTACHLOROPHENOL | ND | 19 | 5.8 |
| PHENANTHRENE | ND | 9.7 | 4.9 |
| PHENOL | ND | 9.7 | 4.9 |
| PYRENE | ND | 9.7 | 4.9 |
| 1,1'-BIPHENYL | ND | 9.7 | 4.9 |
| ACETOPHENONE | ND | 19 | 9.7 |
| ATRAZINE | ND | 9.7 | 4.9 |
| BENZALDEHYDE | ND | 9.7 | 4.9 |
| CAPROLACTAM | ND | 9.7 | 4.9 |
| CARBAZOLE | ND | 9.7 | 4.9 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 89 | 25-134 |
| 2-FLUOROBIPHENYL | 85 | 43-125 |
| 2-FLUOROPHENOL | 72 | 25-125 |
| NITROBENZENE-D5 | 77 | 36-125 |
| PHENOL-D5 | 77 | 25-125 |
| TERPHENYL-D14 | 107 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW INC.      Date Collected: 03/08/05
Project     : MFA SITE 1, CTO 86      Date Received: 03/09/05
Batch No.   : 05C073                 Date Extracted: 03/10/05 18:00
Sample ID   : 86-S1-103              Date Analyzed: 03/13/05 13:58
Lab Samp ID : C073-07               Dilution Factor: 94
Lab File ID : RCH240                Matrix : WATER
Ext Btch ID : SVC020W               % Moisture : NA
Calib. Ref. : RBH022                Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 9.4 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIMETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 83 | 25-134 |
| 2-FLUOROBIPHENYL | 66 | 43-125 |
| 2-FLUOROPHENOL | 56 | 25-125 |
| NITROBENZENE-D5 | 67 | 32-125 |
| PHENOL-D5 | 61 | 25-125 |
| TERPHEHYL-D14 | 94 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05C073
Sample ID: 86-S1-104
Lab Samp ID: C073-08
Lab File ID: RCH241
Ext. Btch ID: SVCD20W
Calib. Ref.: RBH022
Date Collected: 03/08/05
Date Received: 03/09/05
Date Extracted: 03/10/05 18:00
Date Analyzed: 03/15/05 14:26
Dilution Factor: .94
Matrix : WATER
% Moisture : NA
Instrument ID : I-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 9.4 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 5.6 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 19 | 5.6 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 9.4 |
| 4-CHLORO-3-METHYLPHENOL | ND | 19 | 6.6 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-NITROANILINE (1) | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 19 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHthalate | ND | 19 | 9.4 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHthalate | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHthalate | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIMETHYLPHthalate | ND | 19 | 4.7 |
| DIMETHYLPHthalate | ND | 19 | 5.6 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYClopentadiene | ND | 19 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 5.6 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 9.4 | 4.7 |
| PHENANTHRENE | ND | 19 | 9.4 |
| PHENOL | ND | 19 | 5.6 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 19 | 2.3 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | | | |
| 2,4,6-TRIBROMOPHENOL | 73 | 25-134 | |
| 2-FLUOROBIPHENYL | 64 | 43-125 | |
| 2-FLUOROPHENOL | 55 | 52-125 | |
| NITROBENZENE-D5 | 64 | 52-125 | |
| PHENOL-D5 | 59 | 25-125 | |
| TERPHENYL-D14 | 88 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05C073
Sample ID : B6-SI-105
Lab Samp ID : C073-09
Lab File ID : RCH242
Ext Btch ID : SVC020W
Calib. Ref.: RBH022

Date Collected: 03/08/05
Date Received: 03/09/05
Date Extracted: 03/10/05 18:00
Date Analyzed: 03/15/05 14:54
Dilution Factor: .94
Matrix : WATER
% Moisture : NA
Instrument ID : T-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 9.4 |
| 2-CHLORONAPHTHALENE | ND | 19 | 5.6 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 19 | 5.6 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 9.4 |
| 4-CHLORO-3-METHYLPHENOL | ND | 19 | 6.6 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 19 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYL BENZYL PHTHALATE | ND | 19 | 9.4 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYL PHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYL PHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYL PHTHALATE | ND | 9.4 | 4.7 |
| DIMETHYL PHTHALATE | ND | 19 | 5.6 |
| FLUORANTHENE | ND | 19 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 19 | 5.6 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSO-DIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 9.4 | 4.7 |
| PHENANTHRENE | ND | 19 | 9.4 |
| PHENOL | ND | 19 | 5.6 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 2.3 |
| BENZALDEHYDE | ND | 19 | 9.4 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 92 | 25-134 |
| 2-FLUOROBIPHENYL | 73 | 43-125 |
| 2-FLUOROPHENOL | 61 | 25-125 |
| NITROBENZENE-D5 | 72 | 32-125 |
| PHENOL-D5 | 65 | 25-125 |
| TERPHENYL-D14 | 102 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05C073

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Nine (9) water samples were received on 03/09/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**
Analysis met holding time criteria.
2. **Method Blank**
Method blank was free of contamination at the reporting limit.
3. **Lab Control Sample/Lab Control Sample Duplicate**
Lab control results were within QC limit.
4. **Serial Dilution / Post-Analytical Spike**
Sample C073-02 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.
5. **Matrix Spike/Matrix Spike Duplicate**
Sample C073-02 was spiked. All recoveries were within QC limit.
6. **Sample Analysis**
Samples were analyzed according to the prescribed QC procedures. All criteria were met.

All samples were reported from dilution runs due to matrix interference.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : YETRA TECH FM, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05C073

Matrix : WATER
Instrument ID : T1047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|--------------|----------------|----------------|-----|-------|-----------|------------|--------------------|----------------------|------------|------------|------------|----------------------|--------------------|
| MBLK1W | HGC022WB | ND | 1 | NA | -2 | .1 | 03/18/05 13:36 | 03/17/05 16:00 | M47C018010 | M47C018008 | HGC022W | NA | 03/17/05 |
| LCS1W | HGC022WL | 5.06 | 1 | NA | .2 | .1 | 03/18/05 13:38 | 03/17/05 16:00 | M47C018011 | M47C018008 | HGC022W | NA | 03/17/05 |
| LCD1W | HGC022WC | 5.02 | 1 | NA | -2 | .1 | 03/18/05 13:41 | 03/17/05 16:00 | M47C018012 | M47C018008 | HGC022W | NA | 03/17/05 |
| 86-S1-098 | C073-01 | ND | 20 | NA | 4 | 2 | 03/18/05 15:08 | 03/17/05 16:00 | M47C018050 | M47C018043 | HGC022W | 03/07/05 | 03/09/05 |
| 86-S1-100 | C073-03 | ND | 20 | NA | 4 | 2 | 03/18/05 15:10 | 03/17/05 16:00 | M47C018051 | M47C018043 | HGC022W | 03/07/05 | 03/09/05 |
| 86-S1-102 | C073-06 | ND | 20 | NA | 4 | 2 | 03/18/05 15:13 | 03/17/05 16:00 | M47C018052 | M47C018043 | HGC022W | 03/07/05 | 03/09/05 |
| 86-S1-103 | C073-07 | ND | 20 | NA | 4 | 2 | 03/18/05 15:18 | 03/17/05 16:00 | M47C018054 | M47C018055 | HGC022W | 03/08/05 | 03/09/05 |
| 86-S1-104 | C073-08 | ND | 20 | NA | 4 | 2 | 03/18/05 15:24 | 03/17/05 16:00 | M47C018057 | M47C018055 | HGC022W | 03/08/05 | 03/09/05 |
| 86-S1-105 | C073-09 | ND | 20 | NA | 4 | 2 | 03/18/05 15:27 | 03/17/05 16:00 | M47C018058 | M47C018055 | HGC022W | 03/08/05 | 03/09/05 |
| MBLK2W | HGC025WB | ND | 1 | NA | -2 | .1 | 03/21/05 15:19 | 03/21/05 09:30 | M47C020011 | M47C020009 | HGC025W | NA | 03/21/05 |
| LCS2W | HGC025WL | 5.14 | 1 | NA | .2 | .1 | 03/21/05 15:21 | 03/21/05 09:30 | M47C020012 | M47C020009 | HGC025W | NA | 03/21/05 |
| LCD2W | HGC025WC | 5.13 | 1 | NA | -2 | .1 | 03/21/05 15:23 | 03/21/05 09:30 | M47C020013 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |
| 86-S1-097AS | C073-02A | 35.4 | 20 | NA | 4 | 2 | 03/21/05 15:53 | 03/21/05 09:30 | M47C020026 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |
| 86-S1-097 | C073-02 | ND | 20 | NA | 4 | 2 | 03/21/05 15:55 | 03/21/05 09:30 | M47C020027 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |
| 86-S1-097DL | C073-02I | ND | 100 | NA | 20 | 10 | 03/21/05 15:58 | 03/21/05 09:30 | M47C020028 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |
| 86-S1-097RS | C073-02M | 4.06 | 20 | NA | 4 | 2 | 03/21/05 16:00 | 03/21/05 09:30 | M47C020029 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |
| 86-S1-097MSD | C073-02S | 4.08 | 20 | NA | 4 | 2 | 03/21/05 16:02 | 03/21/05 09:30 | M47C020030 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |
| 86-S1-101 | C073-05 | ND | 20 | NA | 4 | 2 | 03/21/05 16:04 | 03/21/05 09:30 | M47C020031 | M47C020021 | HGC025W | 03/07/05 | 03/09/05 |

RL: Reporting Limit

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: March 7 through March 8, 2005
LDC Report Date: April 14, 2005
Matrix: Water
Parameters: Semivolatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05C073

Sample Identification

86-S1-096
86-S1-097
86-S1-098
86-S1-100
86-S1-101
86-S1-102
86-S1-103
86-S1-104**
86-S1-105
86-S1-097MS
86-S1-097MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

| Sample | Internal Standards | Area (Limits) | Compound | Flag | A or P |
|-----------|--------------------|-------------------------|--|---|--------|
| 06-G1-102 | Chrysene-d12 | 477919 (579220-2316882) | Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene Bis(2-ethylhexyl)phthalate | J (all detects) UJ (all non-detects) | P |

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 86-S1-103 and 86-S1-104** were identified as field duplicates. No volatiles were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05C073

| SDG | Sample | Compound | Flag | A or P | Reason |
|--------|-----------|--|---|--------|---------------------------|
| 05C073 | 86-S1-102 | Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene Bis(2-ethylhexyl)phthalate | J (all detects) UJ (all non-detects) | P | Internal standards (area) |

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05C073

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: March 7 through March 8, 2005
LDC Report Date: April 11, 2005
Matrix: Water
Parameters: Dissolved Mercury
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05C073

Sample Identification

86-S1-096
86-S1-097
86-S1-098
86-S1-100
86-S1-101
86-S1-102
86-S1-103
86-S1-104**
86-S1-105
86-S1-097MS
86-S1-097MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP interference check sample analysis is not required by the method.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.



NUMBER
103299

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

2016915-12



1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 03-29-2005
EMAX Batch No.: 05C081

Attn: Lynn Jefferson

Tetra Tech FW, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, Site 1, CTD 86

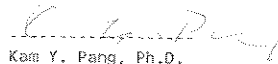
Enclosed is the Laboratory report for samples received on
03/10/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|--|
| 86-S1-106 | C081-01 | 03/08/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-107 | C081-02 | 03/08/05 | WATER | MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GCMS |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,


Kam Y. Pang, Ph.D.
Laboratory Director

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B

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05C081

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Two (2) water samples were received on 03/10/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

```

=====
Client       : TETRA TECH FW, INC.      Date Collected: 03/08/05
Project      : MFA, SITE 1, CTO 86     Date Received: 03/10/05
Batch No.    : 05C081                  Date Extracted: 03/10/05 18:00
Sample ID    : 08-S1-106               Date Analyzed: 03/15/05 15:21
Lab Samp ID  : C081-01                  Dilution Factor: 94
Lab File ID  : RCH243                    Matrix: WATER
Ext Btch ID  : SVC020W                   % Moisture: NA
Calib. Ref.  : RBH022                    Instrument ID : T-041
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,5-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHthalate | ND | 19 | 9.4 |
| BUTYLBENZYLPHthalate | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHthalate | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHthalate | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHthalate | ND | 19 | 5.6 |
| DIMETHYLPHthalate | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 87 | 25-134 |
| 2-FLUOROBIPHENYL | 73 | 43-125 |
| 2-FLUOROPHENOL | 62 | 25-125 |
| NITROBENZENE-D5 | 68 | 32-125 |
| PHENOL-D5 | 67 | 25-125 |
| TERPHENYL-D14 | 99 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 03/08/05
Project      : MFA SITE 1, CTO 86      Date Received: 03/10/05
Batch No.    : 05C081                  Date Extracted: 03/10/05 18:00
Sample ID    : 86-S1-107               Date Analyzed: 03/15/05 15:49
Lab Smp ID   : C081-02                  Dilution Factor: .94
Lab File ID  : RCH244                   Matrix          : WATER
Ext Btch ID  : SVC020W                  % Moisture      : NA
Calib. Ref.  : RBH022                   Instrument ID   : T-041
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 19 | 5.6 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 19 | 9.4 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 19 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.4 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 19 | 5.6 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORAENE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 91 | 25-134 |
| 2-FLUOROBIPHENYL | 78 | 43-125 |
| 2-FLUOROPHENOL | 61 | 25-125 |
| NITROBENZENE-D5 | 69 | 25-125 |
| PHENOL-D5 | 69 | 25-125 |
| TERPHENYL-D14 | 104 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05C081

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Two (2) water samples were received on 03/10/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample C073-02 from another SDG was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Samples were reported from dilution runs due to matrix interference.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH FW, INC.
Project : MPA, SITE 1, CIO 86
Batch No. : 05C081

Matrix : WATER
Instrument ID : T1047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|-----------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MELK1W | HGC025WB | ND | 1 | NA | .2 | .1 | 03/21/0515:19 | 03/21/0509:30 | M47C020011 | M47C020009 | HGC025W | NA | 03/21/05 |
| LCS1W | HGC025WL | 5.14 | 1 | NA | .2 | .1 | 03/21/0515:21 | 03/21/0509:30 | M47C020012 | M47C020009 | HGC025W | NA | 03/21/05 |
| LCD1W | HGC025WC | 5.13 | 1 | NA | .2 | .1 | 03/21/0515:23 | 03/21/0509:30 | M47C020013 | M47C020009 | HGC025W | NA | 03/21/05 |
| 86-S1-107 | C081-02 | ND | 20 | NA | 4 | 2 | 03/21/0516:13 | 03/21/0509:30 | M47C020035 | M47C020032 | HGC025W | 03/08/05 | 03/10/05 |
| 86-S1-106 | C081-01 | ND | 20 | NA | 4 | 2 | 03/21/0516:26 | 03/21/0509:30 | M47C020038 | M47C020036 | HGC025W | 03/08/05 | 03/10/05 |

RL: Reporting Limit

7003

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: March 8, 2005
LDC Report Date: April 14, 2005
Matrix: Water
Parameters: Semivolatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05C081

Sample Identification

86-S1-106**
86-S1-107

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05C081

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05C081

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86

Collection Date: March 8, 2005

LDC Report Date: April 11, 2005

Matrix: Water

Parameters: Dissolved Mercury

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05C081

Sample Identification

86-S1-106**

86-S1-107

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP interference check sample analysis is not required by the method.

V. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) analyses specified for the samples in this SDG, and therefore matrix spike analyses were not performed for this SDG.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not required by the method.

XI. Sample Result Verification

All sample result verifications met validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Dissolved Mercury - Data Qualification Summary - SDG 05C081

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Dissolved Mercury - Laboratory Blank Data Qualification Summary - SDG 05C081

No Sample Data Qualified in this SDG



TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 734-8696

CHAIN-OF-CUSTODY RECORD

NUMBER 10358

| | | | | | | | | | |
|--|--|---|--|------------------------------|--|---|--|--|--|
| PROJECT NAME YOFFETT- SITE 1 | | PURCHASE ORDER NO. 20848 TASK 28 | | ANALYSES REQUIRED | | LABORATORY NAME EMAX | | Project Information Section Do not submit to Laboratory | |
| PROJECT LOCATION YOFFETT FIELD, CA | | PROJECT NO. 1990.086E | | EPA 8210B (EXTRACTED) (LIST) | | LABORATORY ID (FOR LABORATORY) 05D061 | | LOCATION | |
| AMPLIFIER NAME Bill Ogilz | | AIRBILL NUMBER 850458348392 | | EPA 8210A (EXTRACTED) (LIST) | | COMMENTS RUN MS/MSD | | DEPTH START | |
| PROJECT CONTACT YANN JEFFERSON | | PROJECT CONTACT PHONE NUMBER (949) 756-7557 | | EPA 800.8 Dissolved Metals | | | | END | |
| SAMPLE ID | | DATE COLLECTED | | TIME COLLECTED | | NO. OF CONTAINER | | LEVEL | |
| 36-SI-122 | | 4-11-05 | | 1300 | | 3 | | 3 | |
| 36-SI-110 | | 4-11-05 | | 1330 | | 33 | | 3 | |
| 36-SI-112 | | 4-11-05 | | 1530 | | 11 | | 3 | |
| 36-SI-113 | | 4-12-05 | | 0900 | | 11 | | 3 | |
| 36-SI-114 | | 4-12-05 | | 0930 | | 11 | | 3 | |
| 36-SI-115 | | 4-12-05 | | 1015 | | 11 | | 3 | |
| ELINQUISHED BY (Signature) | | DATE | | TIME | | RECEIVED BY (Signature) | | LABORATORY INSTRUCTIONS/COMMENTS | |
| | | 4-12-05 | | 1400 | | | | Metals & Mercury: Field Filtered | |
| ELINQUISHED BY (Signature) | | DATE | | TIME | | RECEIVED BY (Signature) | | COMPOSITE DESCRIPTION | |
| | | 4-12-05 | | 1400 | | | | Metals & Mercury: Field Filtered | |
| COMPANY | | TIME | | RECEIVED BY (Signature) | | COMPANY | | SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY) | |
| ELINQUISHED BY (Signature) | | DATE | | TIME | | RECEIVED BY (Signature) | | TEMPERATURE: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN | |
| | | 4-12-05 | | 1400 | | | | COOLER SEAL: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN | |
| COMPANY | | TIME | | RECEIVED BY (Signature) | | COMPANY | | SAMPLING COMMENT: SITE 1 SEMI-ANNUAL 2005 | |



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 05-09-2005
EMAX Batch No.: 050061

Attn: Lynn Jefferson

Tetra Tech FW, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on
04/13/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|----------------------------------|
| 86-S1-122 | D061-01 | 04/11/05 | WATER | VOLATILE ORGANICS BY GC/MS |
| 86-S1-110 | D061-02 | 04/11/05 | WATER | VOLATILE ORGANICS BY GC/MS |
| | | | | PESTICIDES ORGANOCHLORINE |
| | | | | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | MERCURY DISSOLVED |
| | | | | MT2008DW |
| 86-S1-112 | D061-03 | 04/11/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| | | | | VOLATILE ORGANICS BY GC/MS |
| | | | | PESTICIDES ORGANOCHLORINE |
| | | | | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | MERCURY DISSOLVED |
| | | | | MT2008DW |
| 86-S1-113 | D061-04 | 04/12/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS |
| | | | | VOLATILE ORGANICS BY GC/MS |
| | | | | PESTICIDES ORGANOCHLORINE |
| | | | | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | MERCURY DISSOLVED |
| | | | | MT2008DW |
| | | | | SEMIVOLATILE ORGANICS BY GCMS |

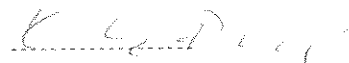
| Sample ID | Control # | Col Date | Matrix | Analysis |
|--------------|-----------|----------|--------|--|
| 86-S1-114 | 0061-05 | 04/12/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW |
| 86-S1-115 | 0061-06 | 04/12/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW |
| 86-S1-110MS | 0061-02M | 04/11/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW |
| 86-S1-110MSD | 0061-02S | 04/11/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW SEMIVOLATILE ORGANICS BY GCMS |

Note: Results for Dissolved Metals which were subcontracted to Columbia Analytical Services, Inc. may be found in SDG 05D053.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,



Kam Y. Pang, Ph.D.
Laboratory Director

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CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D061

**SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS**

Six (6) water samples were received on 04/13/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blanks were free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit except Toluene-d8 in LCS1W but recovery of target analyte met QC criteria.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample D061-02 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

SW 50308/82608
 VOLATILE ORGANICS BY GC/MS

```

=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project      : MFA, SITE 1, CTO 86     Date Received: 04/13/05
Batch No.    : 05D061                  Date Extracted: 04/16/05 01:18
Sample ID    : 86-S1-122               Date Analyzed: 04/16/05 01:18
Lab Samp ID  : D061-01R                Dilution Factor: 1
Lab File ID  : RDP174                  Matrix          : WATER
Ext Btch ID  : V002D13                 % Moisture      : NA
Calib. Ref.  : RDP025                  Instrument ID   : T-002
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .5 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .5 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .5 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .5 |
| 1,1-DICHLOROETHANE | ND | .5 | .5 |
| 1,1-DICHLOROETHENE | ND | .5 | .5 |
| 1,1-DICHLOROPROPENE | ND | .5 | .5 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .5 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .5 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .5 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .5 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .5 |
| 1,2-DICHLOROBENZENE | ND | .5 | .5 |
| 1,2-DICHLOROETHANE | ND | .5 | .5 |
| 1,2-DICHLOROPROPANE | ND | .5 | .5 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .5 |
| 1,3-DICHLOROBENZENE | ND | .5 | .5 |
| 1,3-DICHLOROPROPANE | ND | .5 | .5 |
| 1,4-DICHLOROBENZENE | ND | .5 | .5 |
| 2,2-DICHLOROPROPANE | ND | .5 | .5 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .5 |
| 2-HEXANONE | ND | 10 | .5 |
| 4-CHLOROTOLUENE | ND | .5 | .5 |
| 4-METHYL-2-PENTANONE | ND | 10 | .5 |
| ACETONE | ND | 10 | .5 |
| BENZENE | ND | .5 | .5 |
| BROMOBENZENE | ND | .5 | .5 |
| BROMOCHLOROMETHANE | ND | .5 | .5 |
| BROMODICHLOROMETHANE | ND | .5 | .5 |
| BROMOFORM | ND | .5 | .5 |
| BROMOMETHANE | ND | .5 | .5 |
| CARBON DISULFIDE | ND | .5 | .5 |
| CARBON TETRACHLORIDE | ND | .5 | .5 |
| CHLOROBENZENE | ND | .5 | .5 |
| CHLOROETHANE | ND | .5 | .5 |
| CHLOROFORM | ND | .5 | .5 |
| CHLOROMETHANE | ND | .5 | .5 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .5 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .5 |
| DIBROMOCHLOROMETHANE | ND | .5 | .5 |
| DIBROMOMETHANE | ND | .5 | .5 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .5 |
| ETHYLBENZENE | ND | .5 | .5 |
| HEXACHLOROBUTADIENE | ND | .5 | .5 |
| ISOPROPYL BENZENE | ND | .5 | .5 |
| M/P-XYLENES | ND | .5 | .5 |
| METHYLENE CHLORIDE | ND | .5 | .5 |
| N-BUTYLBENZENE | ND | .5 | .5 |
| N-PROPYLBENZENE | ND | .5 | .5 |
| NAPHTHALENE | ND | .5 | .5 |
| O-XYLENE | ND | .5 | .5 |
| P-ISOPROPYLTOLUENE | ND | .5 | .5 |
| SEC-BUTYLBENZENE | ND | .5 | .5 |
| STYRENE | ND | .5 | .5 |
| TERT-BUTYLBENZENE | ND | .5 | .5 |
| TETRACHLOROETHYLENE | ND | .5 | .5 |
| TOLUENE | ND | .5 | .5 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .5 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .5 |
| TRICHLOROETHENE | ND | .5 | .5 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .5 |
| VINYL CHLORIDE | ND | 1 | .5 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-04 | 110 | 62-139 |
| TOLUENE-D8 | 115 | 75-125 |
| BROMOFLUOROBENZENE | 108 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project      : MFA, SITE 1, CTO 86     Date Received: 04/13/05
Batch No.    : 050061                  Date Extracted: 04/16/05 01:56
Sample ID    : 86-S1-110                Date Analyzed: 04/16/05 01:56
Lab Samp ID  : D061-02R                 Dilution Factor: 1
Lab File ID  : RDP175                   Matrix          : WATER
Ext Btch ID  : V002013                  % Moisture       : NA
Calib. Ref.  : RDP025                   Instrument ID    : T-C025
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 0.5 | 0.3 |
| 1,1,1-TRICHLOROETHANE | ND | 0.5 | 0.3 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 0.5 | 0.3 |
| 1,1,2-TRICHLOROETHANE | ND | 0.5 | 0.3 |
| 1,1-DICHLOROETHANE | ND | 0.5 | 0.3 |
| 1,1-DICHLOROETHENE | ND | 0.5 | 0.3 |
| 1,1-DICHLOROPROPENE | ND | 0.5 | 0.3 |
| 1,2,3-TRICHLOROBENZENE | ND | 0.5 | 0.3 |
| 1,2,3-TRICHLOROPROPANE | ND | 0.5 | 0.3 |
| 1,2,4-TRICHLOROBENZENE | ND | 0.5 | 0.3 |
| 1,2,4-TRIMETHYLBENZENE | ND | 0.5 | 0.3 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 0.5 | 0.3 |
| 1,2-DICHLOROBENZENE | ND | 0.5 | 0.3 |
| 1,2-DICHLOROETHANE | ND | 0.5 | 0.3 |
| 1,2-DICHLOROPROPANE | ND | 0.5 | 0.3 |
| 1,3,5-TRIMETHYLBENZENE | ND | 0.5 | 0.3 |
| 1,3-DICHLOROBENZENE | ND | 0.5 | 0.3 |
| 1,3-DICHLOROPROPANE | ND | 0.5 | 0.3 |
| 1,4-DICHLOROBENZENE | ND | 0.5 | 0.3 |
| 2,2-DICHLOROPROPANE | ND | 0.5 | 0.3 |
| 2-BUTANONE | ND | 1.0 | 0.5 |
| 2-CHLOROTOLUENE | ND | 0.5 | 0.3 |
| 2-HEXANONE | ND | 0.5 | 0.3 |
| 4-CHLOROTOLUENE | ND | 0.5 | 0.3 |
| 4-METHYL-2-PENTANONE | ND | 0.5 | 0.3 |
| ACETONE | ND | 0.5 | 0.3 |
| BENZENE | ND | 0.5 | 0.3 |
| BROMOBENZENE | ND | 0.5 | 0.3 |
| BROMOCHLOROMETHANE | ND | 0.5 | 0.3 |
| BROMODICHLOROMETHANE | ND | 0.5 | 0.3 |
| BROMOFORM | ND | 0.5 | 0.3 |
| BROMOMETHANE | ND | 0.5 | 0.3 |
| CARBON DISULFIDE | ND | 0.5 | 0.3 |
| CARBON TETRACHLORIDE | ND | 0.5 | 0.3 |
| CHLOROBENZENE | ND | 0.5 | 0.3 |
| CHLOROETHANE | ND | 0.5 | 0.3 |
| CHLOROFORM | ND | 0.5 | 0.3 |
| CHLOROMETHANE | ND | 0.5 | 0.3 |
| CIS-1,2-DICHLOROETHENE | ND | 0.5 | 0.3 |
| CIS-1,3-DICHLOROPROPENE | ND | 0.5 | 0.3 |
| DIBROMOCHLOROMETHANE | ND | 0.5 | 0.3 |
| DIBROMOMETHANE | ND | 0.5 | 0.3 |
| DICHLORODIFLUOROMETHANE | ND | 0.5 | 0.3 |
| ETHYLBENZENE | ND | 0.5 | 0.3 |
| HEXACHLOROBUTADIENE | ND | 0.5 | 0.3 |
| ISOPROPYL BENZENE | ND | 0.5 | 0.3 |
| M/P-XYLENES | ND | 0.5 | 0.3 |
| METHYLENE CHLORIDE | ND | 0.5 | 0.3 |
| N-BUTYLBENZENE | ND | 0.5 | 0.3 |
| N-PROPYLBENZENE | ND | 0.5 | 0.3 |
| NAPHTHALENE | ND | 0.5 | 0.3 |
| O-XYLENE | ND | 0.5 | 0.3 |
| P-ISOPROPYLTOLUENE | ND | 0.5 | 0.3 |
| SEC-BUTYLBENZENE | ND | 0.5 | 0.3 |
| STYRENE | ND | 0.5 | 0.3 |
| TERT-BUTYLBENZENE | ND | 0.5 | 0.3 |
| TETRACHLOROETHYLENE | ND | 0.5 | 0.3 |
| TOLUENE | ND | 0.5 | 0.3 |
| TRANS-1,2-DICHLOROETHENE | ND | 0.5 | 0.3 |
| TRANS-1,3-DICHLOROPROPENE | ND | 0.5 | 0.3 |
| TRICHLOROETHENE | ND | 0.5 | 0.3 |
| TRICHLOROFLUOROMETHANE | ND | 0.5 | 0.3 |
| VINYL CHLORIDE | ND | 0.5 | 0.3 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 120 | 62-139 | |
| TOLUENE-D8 | 108 | 75-125 | |
| BROMOFLUOROBENZENE | 97 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client   : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project  : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.: 05D061                   Date Extracted: 04/16/05 02:35
Sample ID: 86-S1-112                Date Analyzed: 04/16/05 02:35
Lab Samp ID: D061-03R               Dilution Factor: 1
Lab File ID: RDP176                 Matrix: WATER
Ext Btch ID: V002D13                % Moisture: NA
Calib. Ref.: RDP025                 Instrument ID: T-002
=====
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 1 | .3 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .2 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .2 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .2 |
| ACETONE | 2.1J | 10 | .2 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | 1 | .3 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 119 | 62-139 |
| TOLUENE-D8 | 112 | 75-125 |
| BROMOFLUOROBENZENE | 98 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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| | | | |
|--------------|-----------------------|------------------|----------------|
| Client | : TETRA TECH FW, INC. | Date Collected: | 04/12/05 |
| Project | : MFA, SITE 1, CTO 86 | Date Received: | 04/13/05 |
| Batch No. | : 050061 | Date Extracted: | 04/16/05 03:13 |
| Sample ID: | 86-S1-113 | Date Analyzed: | 04/16/05 03:13 |
| Lab Samp ID: | D061-04 | Dilution Factor: | 1 |
| Lab File ID: | RDP177 | Matrix: | : WATER |
| Ext Btch ID: | V002D13 | % Moisture: | : NA |
| Calib. Ref.: | RDP025 | Instrument ID: | : T-002 |

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 1 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHENE | ND | 5 | 2 |
| 1,1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 10 | 2 |
| 2-CHLOROTOLUENE | ND | 5 | 2 |
| 2-HEXANONE | ND | 10 | 2 |
| 4-CHLOROTOLUENE | ND | 5 | 2 |
| 4-METHYL-2-PENTANONE | ND | 10 | 2 |
| ACETONE | ND | 10 | 2 |
| BENZENE | ND | 5 | 2 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 1 | 2 |
| BROMOMETHANE | ND | 1 | 2 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 1 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 1 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 2 |
| ETHYL BENZENE | ND | 5 | 2 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 5 | 2 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 1 | 2 |
| VINYL CHLORIDE | ND | 1 | 2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 117 | 62-139 |
| TOLUENE-D8 | 110 | 75-125 |
| BROMOFLUOROBENZENE | 99 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project      : MFA SITE 1, CTO 86      Date Received: 04/13/05
Batch No.    : 05D061                  Date Extracted: 04/20/05 15:26
Sample ID    : 86-S1-114               Date Analyzed: 04/20/05 15:26
Lab Samp ID  : D061-05                 Dilution Factor: 1
Lab File ID  : RDQ385                  Matrix          : WATER
Ext Btch ID  : V005032                 % Moisture      : NA
Calib. Ref.  : RDQ221                  Instrument ID   : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 5 |
| 1,2,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,2-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHENE | ND | 5 | 5 |
| 1,1-DICHLOROPROPENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 5 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 5 |
| 1,2-DICHLOROBENZENE | ND | 5 | 5 |
| 1,2-DICHLOROETHANE | ND | 5 | 5 |
| 1,2-DICHLOROPROPANE | ND | 5 | 5 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROPROPANE | ND | 5 | 5 |
| 1,4-DICHLOROBENZENE | ND | 5 | 5 |
| 2,2-DICHLOROPROPANE | ND | 5 | 5 |
| 2-BUTANONE | ND | 10 | 5 |
| 2-CHLOROTOLUENE | ND | 5 | 5 |
| 2-HEXANONE | ND | 10 | 5 |
| 4-CHLOROTOLUENE | ND | 5 | 5 |
| 4-METHYL-2-PENTANONE | ND | 10 | 5 |
| ACETONE | ND | 10 | 5 |
| BENZENE | ND | 5 | 5 |
| BROMOBENZENE | ND | 5 | 5 |
| BROMOCHLOROMETHANE | ND | 5 | 5 |
| BROMODICHLOROMETHANE | ND | 5 | 5 |
| BROMOFORM | ND | 5 | 5 |
| BROMOMETHANE | ND | 5 | 5 |
| CARBON DISULFIDE | ND | 5 | 5 |
| CARBON TETRACHLORIDE | ND | 5 | 5 |
| CHLOROBENZENE | ND | 5 | 5 |
| CHLOROETHANE | ND | 5 | 5 |
| CHLOROFORM | ND | 5 | 5 |
| CHLOROMETHANE | ND | 5 | 5 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| DIBROMOCHLOROMETHANE | ND | 5 | 5 |
| DIBROMOMETHANE | ND | 5 | 5 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 5 |
| ETHYLBENZENE | ND | 5 | 5 |
| HEXACHLOROBUTADIENE | ND | 5 | 5 |
| ISOPROPYL BENZENE | ND | 5 | 5 |
| M/P-XYLENES | ND | 5 | 5 |
| METHYLENE CHLORIDE | ND | 5 | 5 |
| N-BUTYLBENZENE | ND | 5 | 5 |
| N-PROPYLBENZENE | ND | 5 | 5 |
| NAPHTHALENE | ND | 5 | 5 |
| O-XYLENE | ND | 5 | 5 |
| P-ISOPROPYLTOLUENE | ND | 5 | 5 |
| SEC-BUTYLBENZENE | ND | 5 | 5 |
| STYRENE | ND | 5 | 5 |
| TERT-BUTYLBENZENE | ND | 5 | 5 |
| TETRACHLOROETHYLENE | ND | 5 | 5 |
| TOLUENE | ND | 5 | 5 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| TRICHLOROETHENE | ND | 5 | 5 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 5 |
| VINYL CHLORIDE | ND | 5 | 5 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 121 | 62-139 | |
| TOLUENE-D8 | 102 | 75-125 | |
| BROMOFLUOROBENZENE | 99 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 050061
Sample ID: 86-S1-115
Lab Samp ID: D061-06
Lab File ID: RD0386
Ext Btch ID: V005032
Calib. Ref.: RD0221

Date Collected: 04/12/05
Date Received: 04/13/05
Date Extracted: 04/20/05 16:02
Date Analyzed: 04/20/05 16:02
Dilution Factor: 1
Matrix : WATER
% Moisture : NA
Instrument ID : 1-C05

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 1 | 1 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHENE | ND | 5 | 5 |
| 1,1-DICHLOROPROPENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 5 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 5 |
| 1,2-DICHLOROBENZENE | ND | 5 | 5 |
| 1,2-DICHLOROETHANE | ND | 5 | 5 |
| 1,2-DICHLOROPROPANE | ND | 5 | 5 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROPROPANE | ND | 5 | 5 |
| 1,4-DICHLOROBENZENE | ND | 5 | 5 |
| 2,2-DICHLOROPROPANE | ND | 5 | 5 |
| 2-BUTANONE | ND | 5 | 5 |
| 2-CHLOROTOLUENE | ND | 5 | 5 |
| 2-HEXANONE | ND | 5 | 5 |
| 4-CHLOROTOLUENE | ND | 5 | 5 |
| 4-METHYL-2-PENTANONE | ND | 5 | 5 |
| ACETONE | 3.1J | 5 | 5 |
| BENZENE | ND | 5 | 5 |
| BROMOBENZENE | ND | 5 | 5 |
| BROMOCHLOROMETHANE | ND | 5 | 5 |
| BROMODICHLOROMETHANE | ND | 5 | 5 |
| BROMOFORM | ND | 5 | 5 |
| BROMOMETHANE | ND | 5 | 5 |
| CARBON DISULFIDE | ND | 5 | 5 |
| CARBON TETRACHLORIDE | ND | 5 | 5 |
| CHLOROBENZENE | ND | 5 | 5 |
| CHLOROETHANE | ND | 5 | 5 |
| CHLOROFORM | ND | 5 | 5 |
| CHLOROMETHANE | ND | 5 | 5 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| DIBROMOCHLOROMETHANE | ND | 5 | 5 |
| DIBROMOMETHANE | ND | 5 | 5 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 5 |
| ETHYLBENZENE | ND | 5 | 5 |
| HEXACHLOROBUTADIENE | ND | 5 | 5 |
| ISOPROPYL BENZENE | ND | 5 | 5 |
| M/P-XYLENES | ND | 5 | 5 |
| METHYLENE CHLORIDE | ND | 5 | 5 |
| N-BUTYLBENZENE | ND | 5 | 5 |
| N-PROPYLBENZENE | ND | 5 | 5 |
| NAPHTHALENE | ND | 5 | 5 |
| O-XYLENE | ND | 5 | 5 |
| P-ISOPROPYLTOLUENE | ND | 5 | 5 |
| SEC-BUTYLBENZENE | ND | 5 | 5 |
| STYRENE | ND | 5 | 5 |
| TERT-BUTYLBENZENE | ND | 5 | 5 |
| TETRACHLOROETHYLENE | ND | 5 | 5 |
| TOLUENE | ND | 5 | 5 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| TRICHLOROETHENE | ND | 5 | 5 |
| TRICHLOROFUOROMETHANE | ND | 5 | 5 |
| VINYL CHLORIDE | ND | 5 | 5 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 114 | 62-139 |
| TOLUENE-D8 | 101 | 75-125 |
| BROMOFLUOROBENZENE | 98 | 75-125 |

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05D061

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Five (5) water samples were received on 04/13/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample D061-02 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project      : MFA SITE 1, CTO 86      Date Received: 04/13/05
Batch No.    : 05D061                  Date Extracted: 04/18/05 13:00
Sample ID    : 86-S1-110               Date Analyzed: 04/19/05 15:49
Lab Samp ID  : D061-02                  Dilution Factor: 95
Lab File ID  : RDH116                    Matrix: WATER
Ext Btch ID  : SVD016W                  % Moisture: NA
Calib. Ref.  : RCH307                   Instrument ID: T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 9.5 | 4.8 |
| 2,4-DINITROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DINITROTOLUENE | ND | 9.5 | 5.7 |
| 2,6-DINITROTOLUENE | ND | 9.5 | 4.8 |
| 2-CHLORONAPHTHALENE | ND | 9.5 | 4.8 |
| 2-CHLOROPHENOL | ND | 9.5 | 4.8 |
| 2-METHYLNAPHTHALENE | ND | 9.5 | 4.8 |
| 2-METHYLPHENOL | ND | 9.5 | 4.8 |
| 2-NITROANILINE | ND | 9.5 | 5.7 |
| 2-NITROPHENOL | ND | 9.5 | 4.8 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.5 | 4.8 |
| 3-NITROANILINE | ND | 9.5 | 4.8 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 9.5 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.5 | 4.8 |
| 4-CHLOROANILINE | ND | 9.5 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 9.5 | 4.8 |
| 4-NITROANILINE | ND | 9.5 | 4.8 |
| 4-NITROPHENOL | ND | 9.5 | 4.8 |
| ACENAPHTHENE | ND | 9.5 | 4.8 |
| ACENAPHTHYLENE | ND | 9.5 | 4.8 |
| ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)PYRENE | ND | 9.5 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.5 | 4.8 |
| BUTYLBENZYLPHTHALATE | ND | 9.5 | 4.8 |
| CHRYSENE | ND | 9.5 | 4.8 |
| DI-N-BUTYLPHTHALATE | ND | 9.5 | 4.8 |
| DI-N-OCTYLPHTHALATE | ND | 9.5 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.5 | 4.8 |
| DIBENZOFURAN | ND | 9.5 | 5.7 |
| DIETHYLPHTHALATE | ND | 9.5 | 4.8 |
| DIMETHYLPHTHALATE | ND | 9.5 | 4.8 |
| FLUORANTHENE | ND | 9.5 | 4.8 |
| FLUORENE | ND | 9.5 | 4.8 |
| HEXACHLOROBENZENE | ND | 9.5 | 5.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.5 | 4.8 |
| HEXACHLOROETHANE | ND | 9.5 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.5 | 4.8 |
| ISOPHORONE | ND | 9.5 | 4.8 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.5 | 4.8 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.5 | 4.8 |
| NITROBENZENE | ND | 9.5 | 4.8 |
| PENTACHLOROPHENOL | ND | 9.5 | 5.7 |
| PHENANTHRENE | ND | 9.5 | 4.8 |
| PHENOL | ND | 9.5 | 4.8 |
| PYRENE | ND | 9.5 | 4.8 |
| 1,1'-BIPHENYL | ND | 9.5 | 4.8 |
| ACETOPHENONE | ND | 9.5 | 2.6 |
| ATRAZINE | ND | 9.5 | 9.5 |
| BENZALDEHYDE | ND | 9.5 | 4.8 |
| CAPROLACTAM | ND | 9.5 | 4.8 |
| CARBAZOLE | ND | 9.5 | 4.8 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 62 | 25-134 |
| 2-FLUOROBIPHENYL | 62 | 43-125 |
| 2-FLUOROPHENOL | 58 | 25-125 |
| NITROBENZENE-D5 | 63 | 32-125 |
| PHENOL-D5 | 60 | 25-125 |
| TERPHENYL-D14 | 76 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client   : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project  : MFA SITE 1, CTO 86      Date Received: 04/13/05
Batch No.: 05D061                  Date Extracted: 04/16/05 13:00
Sample ID: 86-S1-112               Date Analyzed: 04/19/05 17:12
Lab Samp ID: D061-03                Dilution Factor: .94
Lab File ID: RDH119                 Matrix : WATER
Ext Btch ID: SVD016W                % Moisture : NA
Calib. Ref.: RCH307                 Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 3-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 3-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 3-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 19 | 9.4 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 19 | 5.6 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| DIMETHYLPHTHALATE | ND | 9.4 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 19 | 5.6 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 9.4 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 63 | 25-134 |
| 2-FLUOROBIPHENYL | 60 | 43-125 |
| 2-FLUOROPHENOL | 55 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-125 |
| PHENOL-D5 | 58 | 25-125 |
| TERPHENYL-D14 | 72 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

| | |
|-------------------------------|--------------------------------|
| Client : TETRA TECH FW, INC. | Date Collected: 04/12/05 |
| Project : MFA, SITE 1, CTO 86 | Date Received: 04/13/05 |
| Batch No. : 05D061 | Date Extracted: 04/18/05 13:00 |
| Sample ID: 86-S1-113 | Date Analyzed: 04/19/05 17:39 |
| Lab Samp ID: DD61-04 | Dilution Factor: .94 |
| Lab File ID: RDH120 | Matrix : WATER |
| Ext Btch ID: SVD016W | % Moisture : NA |
| Calib. Ref.: RCH307 | Instrument ID : T-041 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 5.6 |
| 2,6-DINITROTOLUENE | ND | 9.4 | 4.7 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 19 | 5.6 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 3-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,4-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 19 | 9.4 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLORDANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 19 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHRENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.4 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 19 | 5.6 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| DIMETHYLPHTHALATE | ND | 9.4 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 19 | 5.6 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORENE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 69 | 25-134 |
| 2-FLUOROBIPHENYL | 66 | 43-125 |
| 2-FLUOROPHENOL | 60 | 25-125 |
| NITROBENZENE-D5 | 66 | 32-125 |
| PHENOL-D5 | 64 | 25-125 |
| TERPHENYL-D14 | 83 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/B270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project      : MFA, SITE 1, CTO 86     Date Received: 04/13/05
Batch No.    : 050061                  Date Extracted: 04/16/05 13:00
Sample ID    : 86-S1-114               Date Analyzed: 04/19/05 18:07
Lab Samp ID  : D061-05                 Dilution Factor: 97
Lab File ID  : RDH121                  Matrix: WATER
Ext Btch ID  : SVD016W                 % Moisture: NA
Calib. Ref.  : RCH307                  Instrument ID: T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4-DICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4-DIMETHYLPHENOL | ND | 9.7 | 4.9 |
| 2,4-DINITROPHENOL | ND | 19 | 9.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.7 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.8 |
| 2-CHLORONAPHTHALENE | ND | 9.7 | 4.9 |
| 2-CHLOROPHENOL | ND | 9.7 | 4.9 |
| 2-METHYLNAPHTHALENE | ND | 9.7 | 4.9 |
| 2-METHYLPHENOL | ND | 9.7 | 4.9 |
| 2-NITROANILINE | ND | 19 | 3.8 |
| 2-NITROPHENOL | ND | 9.7 | 4.9 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.7 | 4.9 |
| 3-NITROANILINE | ND | 9.7 | 4.9 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.8 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.7 | 4.9 |
| 4-CHLOROANILINE | ND | 9.7 | 4.9 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.7 | 4.9 |
| 4-METHYLPHENOL (1) | ND | 9.7 | 4.9 |
| 4-NITROANILINE | ND | 9.7 | 4.9 |
| 4-NITROPHENOL | ND | 19 | 4.9 |
| ACENAPHTHENE | ND | 9.7 | 4.9 |
| ACENAPHTHYLENE | ND | 9.7 | 4.9 |
| ANTHRACENE | ND | 9.7 | 4.9 |
| BENZO(A)ANTHRACENE | ND | 9.7 | 4.9 |
| BENZO(A)PYRENE | ND | 9.7 | 4.9 |
| BENZO(B)FLUORANTHENE | ND | 9.7 | 4.9 |
| BENZO(K)FLUORANTHENE | ND | 9.7 | 4.9 |
| BENZO(G,H,I)PERYLENE | ND | 9.7 | 4.9 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.7 | 4.9 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.7 | 4.9 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.7 | 4.9 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.7 | 4.9 |
| CHRYSENE | ND | 9.7 | 4.9 |
| DI-N-BUTYLPHTHALATE | ND | 9.7 | 4.9 |
| DI-N-OCTYLPHTHALATE | ND | 9.7 | 4.9 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.7 | 4.9 |
| DIBENZOFURAN | ND | 9.7 | 4.9 |
| DIETHYLPHTHALATE | ND | 19 | 5.8 |
| DIMETHYLPHTHALATE | ND | 19 | 4.9 |
| FLUORANTHENE | ND | 9.7 | 4.9 |
| FLUORENE | ND | 9.7 | 4.9 |
| HEXACHLOROBENZENE | ND | 19 | 5.8 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.7 | 4.9 |
| HEXACHLOROETHANE | ND | 9.7 | 4.9 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.7 | 4.9 |
| ISOPHORONE | ND | 9.7 | 4.9 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.7 | 4.9 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.7 | 4.9 |
| NITROBENZENE | ND | 9.7 | 4.9 |
| PENTACHLOROPHENOL | ND | 19 | 5.8 |
| PHENANTHRENE | ND | 9.7 | 4.9 |
| PHENOL | ND | 9.7 | 4.9 |
| PYRENE | ND | 9.7 | 4.9 |
| 1,1'-BIPHENYL | ND | 9.7 | 4.9 |
| ACETOPHENONE | ND | 9.7 | 2.4 |
| ATRAZINE | ND | 19 | 9.7 |
| BENZALDEHYDE | ND | 9.7 | 4.9 |
| CAPROLACTAM | ND | 9.7 | 4.9 |
| CARBAZOLE | ND | 9.7 | 4.9 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 71 | 25-134 |
| 2-FLUOROBIPHENYL | 67 | 43-125 |
| 2-FLUOROPHENOL | 64 | 25-125 |
| NITROBENZENE-D5 | 68 | 32-125 |
| PHENOL-D5 | 67 | 25-125 |
| TERPHENYL-D14 | 84 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project      : MFA, SITE 1, CTO 86     Date Received: 04/13/05
Batch No.    : 05D061                  Date Extracted: 04/16/05 13:00
Sample ID    : 86-S1-115                Date Analyzed: 04/19/05 18:55
Lab Samp ID  : 0061-06                  Dilution Factor: 94
Lab File ID  : RDH122                    Matrix: WATER
Ext Btch ID  : SVD016W..                 % Moisture: NA
Calib. Ref.  : RCH307                    Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 19 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.4 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 19 | 5.6 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| DIMETHYLPHTHALATE | ND | 9.4 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 19 | 5.6 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCLYCOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 80 | 25-134 |
| 2-FLUOROBIPHENYL | 75 | 43-125 |
| 2-FLUOROPHENOL | 67 | 25-125 |
| NITROBENZENE-D5 | 75 | 52-125 |
| PHENOL-D5 | 72 | 25-125 |
| TERPHENYL-D14 | 93 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D061

**SW3520C/8081A
PESTICIDES**

Five (5) water samples were received on 04/13/05 for Pesticides analysis by Method 3520C/8081A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was at five-point for Pesticides, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and mean recoveries were within 85-115%. Endrin and DDT breakdown were within QC limits.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

Sample D061-02 was spiked. All recoveries were within QC limits.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

When sample results are confirmed by a second column, the relative percentage difference (RPD) between the two results is calculated. If RPD is less than 40%, and no evidence of chromatographic problems, the higher result is reported. If RPD is greater than 40%, the chromatogram is checked for anomalies and results are selected based on the best professional judgement. If no evidence of any chromatographic problems, the higher result is reported.

SW3520C/8081A
PESTICIDES

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project      : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.    : 05D061                   Date Extracted: 04/14/05 13:00
Sample ID    : 86-S1-110                Date Analyzed: 04/18/05 17:20
Lab Samp ID  : D061-02                  Dilution Factor: .94
Lab File ID  : SD18014A                 Matrix          : WATER
Ext Btch ID  : CPD012W                  % Moisture       : NA
Calib. Ref.  : SD18003A                 Instrument ID    : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) (ND) | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) (ND) | .047 | .0094 .0094 |
| BETA-BHC | (ND) (ND) | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) (ND) | .047 | .0094 .0094 |
| DELTA-BHC | (ND) (ND) | .047 | .0094 .0094 |
| ALDRIN | (ND) (ND) | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) (ND) | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) (ND) | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) (ND) | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) (ND) | .047 | .028 .028 |
| 4,4'-DDE | (ND) (ND) | .094 | .028 .028 |
| DIELDRIN | (ND) (ND) | .19 | .094 .094 |
| ENDRIN | (ND) (ND) | .094 | .019 .019 |
| 4,4'-DDD | (ND) (ND) | .094 | .028 .028 |
| ENDOSULFAN II | (ND) (ND) | .094 | .019 .019 |
| 4,4'-DDT | (ND) (ND) | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) (ND) | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) (ND) | .094 | .019 .019 |
| ENDRIN KETONE | (ND) (ND) | .094 | .019 .019 |
| METHOXYCHLOR | (ND) (ND) | .47 | .094 .094 |
| TOXAPHENE | (ND) (ND) | 2.8 | 1.2 1.2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | 80 (89) | 30-130 | |
| DECACHLOROBIPHENYL | (89) 87 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 050061 ..               Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-112                 Date Analyzed: 04/18/05 18:35
Lab Samp ID: D061-03                 Dilution Factor: .94
Lab File ID: SD18017A                Matrix       : WATER
Ext Btch ID: CPD012W                 % Moisture    : NA
Calib. Ref.: SD18003A                 Instrument ID : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) ND | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) .014J | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .094 .094 |
| ENDRIN | (ND) ND | .094 | .019 .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | 54 (68) | 30-130 |
| DECACHLOROBIPHENYL | (85) 84 | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
 PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 05D061                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-113                  Date Analyzed: 04/18/05 19:01
Lab Samp ID: D061-04                  Dilution Factor: 1.06
Lab File ID: SD18018A                  Matrix          : WATER
Ext Btch ID: CPD012W                  % Moisture       : NA
Calib. Ref.: SD18003A                  Instrument ID    : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .053 | .011 |
| GAMMA-BHC (LINDANE) | (ND) ND | .053 | .011 |
| BETA-BHC | (ND) ND | .053 | .011 |
| HEPTACHLOR | (ND) ND | .053 | .011 |
| DELTA-BHC | (ND) ND | .053 | .011 |
| ALDRIN | (ND) ND | .053 | .011 |
| HEPTACHLOR EPOXIDE | (ND) ND | .053 | .011 |
| GAMMA-CHLORDANE | (ND) ND | .053 | .011 |
| ALPHA-CHLORDANE | (ND) ND | .053 | .011 |
| ENDOSULFAN I | (ND) ND | .053 | .032 |
| 4,4'-DDE | (ND) ND | .11 | .032 |
| DIELDRIN | (ND) ND | .21 | .11 |
| ENDRIN | (ND) ND | .11 | .021 |
| 4,4'-DDD | (ND) ND | .11 | .032 |
| ENDOSULFAN II | (ND) ND | .11 | .021 |
| 4,4'-DDT | (ND) ND | .11 | .021 |
| ENDRIN ALDEHYDE | (ND) ND | .11 | .021 |
| ENDOSULFAN SULFATE | (ND) ND | .11 | .021 |
| ENDRIN KETONE | (ND) ND | .11 | .021 |
| METHOXYCHLOR | (ND) ND | .53 | .11 |
| TOXAPHENE | (ND) ND | 3.2 | 1.3 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | 57 (63) | 30-130 |
| DECACHLOROBIPHENYL | (84) 83 | 30-130 |

RL : Reporting limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column

SW3520C/8081A
 PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 05D061 ..               Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-114                 Date Analyzed: 04/18/05 19:26
Lab Samp ID: D061-05                 Dilution Factor: .94
Lab File ID: SD18019A                Matrix      : WATER
Ext Btch ID: CPD012W                 % Moisture   : NA
Calib. Ref.: SD18003A                Instrument ID: GCT008
=====
  
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) ND | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .094 .094 |
| ENDRIN | (ND) ND | .094 | .019 .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | 78 (87) | 30-130 |
| DECACHLOROBIPHENYL | (88) 87 | 30-130 |

RL : Reporting limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 05D061                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-115                Date Analyzed: 04/18/05 19:51
Lab Samp ID : D061-06                  Dilution Factor: .94
Lab File ID : SD18020A                 Matrix       : WATER
Ext Btch ID : CPD012W                  % Moisture   : NA
Calib. Ref. : SD18003A                 Instrument ID : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) ND | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .094 .094 |
| ENDRIN | (ND) ND | .094 | .019 .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | 65 (67) | 30-130 |
| DECACHLOROBIPHENYL | (88) 84 | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D061

SW3520C/8082
PCBs

Five (5) water samples were received on 04/13/05 for PCBs analysis by Method 3520C/8082 in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was five points for PCB-1016 and PCB-1260, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and all recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

Sample D061-02 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 05D061                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-110                Date Analyzed: 04/18/05 17:20
Lab Samp ID : D061-02                  Dilution Factor: .94
Lab File ID : SD18014A                 Matrix       : WATER
Ext Btch ID : CPD012W                  % Moisture    : NA
Calib. Ref. : SD18006A                 Instrument ID : GGT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (72) 83 | 30-130 |
| DECACHLOROBIPHENYL | (98) 97 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 050061                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-112               Date Analyzed: 04/18/05 18:35
Lab Samp ID : D061-03                 Dilution Factor: .94
Lab File ID : SD18017A                Matrix       : WATER
Ext Btch ID : CPD012W                 % Moisture    : NA
Calib. Ref. : SD18006A                Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (54) 63 | 30-130 |
| DECACHLOROBIPHENYL | (93) 93 | 30-130 |

RL: Reporting Limit
Left of | is related to first column ; Right of | related to second column
() included the reported column
* Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 050061                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-113                Date Analyzed: 04/18/05 19:01
Lab Samp ID : D061-04                  Dilution Factor: 1.06
Lab File ID : SD18018A                 Matrix       : WATER
Ext Btch ID : CPD012W                  % Moisture    : NA
Calib. Ref. : SD18006A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | 1.1 | .26 .26 |
| PCB-1221 | (ND) ND | 1.1 | .26 .26 |
| PCB-1232 | (ND) ND | 1.1 | .26 .26 |
| PCB-1242 | (ND) ND | 1.1 | .26 .26 |
| PCB-1248 | (ND) ND | 1.1 | .26 .26 |
| PCB-1254 | (ND) ND | 1.1 | .26 .26 |
| PCB-1260 | (ND) ND | 1.1 | .26 .26 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (52) 60 | 30-130 |
| DECACHLOROBIPHENYL | (94) 91 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 05D061                   Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-114                 Date Analyzed: 04/18/05 19:26
Lab Samp ID : D061-05                    Dilution Factor: .94
Lab File ID : SD18019A                   Matrix       : WATER
Ext Btch ID : CPD012W                     % Moisture    : NA
Calib. Ref. : SD18006A                    Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (75) 83 | 30-130 |
| DECACHLOROBIPHENYL | (98) 96 | 30-130 |

RL: Reporting Limit
Left of | is related to first column ; Right of | related to second column
() included the reported column
* Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/13/05
Batch No.   : 05D061                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-115               Date Analyzed: 04/18/05 19:51
Lab Samp ID : D061-06                  Dilution Factor: .94
Lab File ID : SD18020A                 Matrix       : WATER
Ext Btch ID : CPD012W                  % Moisture    : NA
Calib. Ref. : SD18006A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (55) 67 | 30-130 |
| DECACHLOROBIPHENYL | (97) 93 | 30-130 |

RL: Reporting Limit
Left of | is related to first column ; Right of | related to second column
() included the reported column
* Out side of QC Limit

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D061

**METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR**

Five (5) water samples were received on 04/13/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample D061-02 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

Sample D061-02 was spiked. All recoveries were within QC limit.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Samples were analyzed at DF 20 due to matrix interference.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Matrix : WATER
Instrument ID : 11047

Client : TETRA TECH FM, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 050061

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LCID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|--------------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGD016MB | ND | 1 | NA | .2 | .1 | 04/20/0517:08 | 04/19/0515:30 | M47D015010 | M47D015008 | HGD016W | NA | 04/19/05 |
| LCS1W | HGD016ML | 4.95 | 1 | NA | .2 | .1 | 04/20/0517:10 | 04/19/0515:30 | M47D015011 | M47D015008 | HGD016W | NA | 04/19/05 |
| LCS1W | HGD016MC | 4.91 | 1 | NA | .2 | .1 | 04/20/0517:12 | 04/19/0515:30 | M47D015012 | M47D015008 | HGD016W | NA | 04/13/05 |
| 86-S1-110AS | D061-02A | 4.3 | 20 | NA | 4 | 2 | 04/20/0517:15 | 04/19/0515:30 | M47D015013 | M47D015008 | HGD016W | 04/11/05 | 04/13/05 |
| 86-S1-110 | D061-02 | ND | 20 | NA | 4 | 2 | 04/20/0517:17 | 04/19/0515:30 | M47D015014 | M47D015008 | HGD016W | 04/11/05 | 04/13/05 |
| 86-S1-110BL | D061-021 | ND | 100 | NA | 20 | 10 | 04/20/0517:20 | 04/19/0515:30 | M47D015015 | M47D015008 | HGD016W | 04/11/05 | 04/13/05 |
| 86-S1-110MS | D061-02M | 4.58 | 20 | NA | 4 | 2 | 04/20/0517:22 | 04/19/0515:30 | M47D015016 | M47D015008 | HGD016W | 04/11/05 | 04/13/05 |
| 86-S1-110MSD | D061-02S | 4.98 | 20 | NA | 4 | 2 | 04/20/0517:25 | 04/19/0515:30 | M47D015017 | M47D015008 | HGD016W | 04/11/05 | 04/13/05 |
| 86-S1-112 | D061-03 | ND | 20 | NA | 4 | 2 | 04/20/0517:27 | 04/19/0515:30 | M47D015018 | M47D015008 | HGD016W | 04/11/05 | 04/13/05 |
| 86-S1-113 | D061-04 | ND | 20 | NA | 4 | 2 | 04/20/0517:29 | 04/19/0515:30 | M47D015019 | M47D015008 | HGD016W | 04/12/05 | 04/13/05 |
| 86-S1-114 | D061-05 | ND | 20 | NA | 4 | 2 | 04/20/0517:37 | 04/19/0515:30 | M47D015022 | M47D015020 | HGD016W | 04/12/05 | 04/13/05 |
| 86-S1-115 | D061-06 | ND | 20 | NA | 4 | 2 | 04/20/0517:39 | 04/19/0515:30 | M47D015023 | M47D015020 | HGD016W | 04/12/05 | 04/13/05 |

RL: Reporting Limit

7003

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11 through April 12, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Volatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D061

Sample Identification

86-S1-122
86-S1-110
86-S1-112
86-S1-113
86-S1-114**
86-S1-115
86-S1-110MS
86-S1-110MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for all individual compounds.

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

For the purposes of technical evaluation, all compounds were evaluated against the 20.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 86-S1-113 and 86-S1-115 were identified as field duplicates. No volatiles were detected in any of the samples.

XVII. Field Blanks

Sample 86-S1-122 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Airfield, MFA Site 1, CTO 86

Volatiles - Data Qualification Summary - SDG 05D061

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86

Volatiles - Laboratory Blank Data Qualification Summary - SDG 05D061

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11 through April 12, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Semivolatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D061

Sample Identification

86-S1-110
86-S1-112
86-S1-113
86-S1-114**
86-S1-115
86-S1-110MS
86-S1-110MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05D061

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05D061

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11 through April 12, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Chlorinated Pesticides
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D061

Sample Identification

86-S1-110
86-S1-112
86-S1-113
86-S1-114**
86-S1-115
86-S1-110MS
86-S1-110MSD

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

The individual 4,4'-DDT and Endrin breakdowns were less than 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

Samples 86-S1-113 and 86-S1-114** were identified as field duplicates. No chlorinated pesticides were detected in any of the samples.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Chlorinated Pesticides - Data Qualification Summary - SDG 05D061

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG 05D061

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11 through April 12, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Polychlorinated Biphenyls
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 05D061

Sample Identification

86-S1-110
86-S1-112
86-S1-113
86-S1-114**
86-S1-115
86-S1-110MS
86-S1-110MSD

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance data were not provided and therefore not reviewed.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

Samples 86-S1-113 and 86-S1-114** were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples.

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Air Field, Site 1, CTO 86
Collection Date: April 11 through April 12, 2005
LDC Report Date: May 23, 2005
Matrix: Water
Parameters: Metals
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc./Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): 05D061/K2502714

Sample Identification

86-S1-110
86-S1-112
86-S1-113
86-S1-114**
86-S1-115
86-S1-110MS
86-S1-110MSD
86-S1-110DUP

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B and 7000 and EPA Method 200.8 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|-----------------|--|--|--|
| PB (prep blank) | Beryllium Copper Nickel Selenium Thallium Zinc | 0.00009 ug/L 0.0010 ug/L 0.031 ug/L 0.74 ug/L 0.00027 ug/L 0.006 ug/L | All samples in SDG 05D061/K2502714 |
| ICB/CCB | Antimony | 0.012 ug/L | 86-S1-110 |
| ICB/CCB | Beryllium Cadmium Cobalt Nickel Selenium Silver Thallium | 0.02 ug/L 0.02 ug/L 0.0050 ug/L 0.495 ug/L 0.28 ug/L 0.01 ug/L 0.05 ug/L | 86-S1-110 86-S1-112 |
| ICB/CCB | Antimony | 0.014 ug/L | 86-S1-112 86-S1-113 86-S1-114** 86-S1-115 |

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|-----------------|---|--|---------------------------------------|
| ICB/CCB | Arsenic Beryllium Cadmium Chromium Cobalt Copper Nickel Silver Thallium Zinc | 0.097 ug/L 0.00990 ug/L 0.0108 ug/L 0.207 ug/L 0.0138 ug/L 0.0205 ug/L 0.022 ug/L 0.0150 ug/L 0.02500 ug/L 0.035 ug/L | 86-S1-113 86-S1-114** 86-S1-115 |

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|-------------|---|---|---|
| 86-S1-110 | Antimony Beryllium Selenium | 0.382 ug/L 0.00386 ug/L 0.48 ug/L | 0.382U ug/L 0.00386U ug/L 0.48U ug/L |
| 86-S1-112 | Antimony Beryllium Selenium Thallium | 0.296 ug/L 0.00479 ug/L 0.68 ug/L 0.00288 ug/L | 0.296U ug/L 0.00479U ug/L 0.68U ug/L 0.00288U ug/L |
| 86-S1-113 | Antimony Beryllium Selenium Silver | 0.300 ug/L 0.00216 ug/L 0.46 ug/L 0.0027 ug/L | 0.300U ug/L 0.00216U ug/L 0.46U ug/L 0.0027U ug/L |
| 86-S1-114** | Antimony Beryllium Selenium Silver | 0.0306 ug/L 0.00121 ug/L 0.52 ug/L 0.0029 ug/L | 0.0306U ug/L 0.00121U ug/L 0.52U ug/L 0.0029U ug/L |
| 86-S1-115 | Antimony Selenium Silver | 0.414 ug/L 0.84 ug/L 0.0017 ug/L | 0.414U ug/L 0.84U ug/L 0.0017U ug/L |

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|-----------------|---|--|---------------------------------------|
| ICB/CCB | Arsenic Beryllium Cadmium Chromium Cobalt Copper Nickel Silver Thallium Zinc | 0.097 ug/L 0.00990 ug/L 0.0108 ug/L 0.207 ug/L 0.0138 ug/L 0.0205 ug/L 0.022 ug/L 0.0150 ug/L 0.02500 ug/L 0.035 ug/L | 86-S1-113 86-S1-114** 86-S1-115 |

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|-------------|---|---|---|
| 86-S1-110 | Antimony Beryllium Selenium | 0.382 ug/L 0.00386 ug/L 0.48 ug/L | 0.382U ug/L 0.00386U ug/L 0.48U ug/L |
| 86-S1-112 | Antimony Beryllium Selenium Thallium | 0.296 ug/L 0.00479 ug/L 0.68 ug/L 0.00288 ug/L | 0.296U ug/L 0.00479U ug/L 0.68U ug/L 0.00288U ug/L |
| 86-S1-113 | Antimony Beryllium Selenium Silver | 0.300 ug/L 0.00216 ug/L 0.48 ug/L 0.0027 ug/L | 0.300U ug/L 0.00216U ug/L 0.46U ug/L 0.0027U ug/L |
| 86-S1-114** | Antimony Beryllium Selenium Silver | 0.306 ug/L 0.00121 ug/L 0.52 ug/L 0.0029 ug/L | 0.306U ug/L 0.00121U ug/L 0.52U ug/L 0.0029U ug/L |
| 86-S1-115 | Antimony Selenium Silver | 0.414 ug/L 0.84 ug/L 0.0017 ug/L | 0.414U ug/L 0.84U ug/L 0.0017U ug/L |

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | %R (Limits) | Flag | A or P |
|--|--------------------------------|---|---|--------|
| 86-S1-110MS (All samples in SDG 05D061/K2502714) | Arsenic Beryllium Copper | 56 (75-125) 69 (75-125) 73 (75-125) | J (all detects) UJ (all non-detects) | A |

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

All internal standard percent recoveries (%R) were within QC limits for samples on which a EPA Level IV review was performed with the following exceptions:

| Sample | Internal Standard | %R (Limits) | Analyte | Flag | A or P |
|-------------|-------------------|----------------|--------------------|--|--------|
| 86-S1-114** | Indium-115 | 160.3 (60-125) | Antimony Barium | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | P |

Raw data were not evaluated for the samples reviewed by Level III criteria.

IX. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for samples reviewed by Level III criteria.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

All sample result verification met validation criteria with the following exceptions:

| Sample | Analyte | Finding | Criteria | Flag | A or P |
|------------------------------------|----------|---|---|------|--------|
| All samples in SDG 05D061/K2502714 | Antimony | Laboratory method detection limit reported at 0.12 ug/L | MDL should be reported at 0.05 ug/L per the QAPP. | None | P |
| All samples in SDG 05D061/K2502714 | Barium | Laboratory method detection limit reported at 0.60 ug/L | MDL should be reported at 0.05 ug/L per the QAPP. | None | P |

Raw data were not evaluated for samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

Samples 86-S1-113 and 86-S1-114** were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

| Compound | Concentration (ug/L) | | RPD |
|-----------|----------------------|-------------|-----|
| | 86-S1-113 | 86-S1-114** | |
| Antimony | 0.300 | 0.306 | 2 |
| Arsenic | 1.550 | 1.630 | 5 |
| Barium | 74.3 | 73.4 | 1 |
| Beryllium | 0.00216 | 0.00121 | 56 |
| Cadmium | 0.2700 | 0.2940 | 9 |
| Chromium | 0.375 | 0.283 | 28 |
| Cobalt | 4.6700 | 6.3700 | 31 |
| Copper | 0.5280 | 0.5730 | 8 |
| Lead | 0.012 | 0.013 | 8 |

| Compound | Concentration (ug/L) | | RPD |
|----------|----------------------|-------------|-----|
| | 86-S1-113 | 86-S1-114** | |
| Nickel | 87.9 | 99.0 | 12 |
| Selenium | 0.46 | 0.52 | 12 |
| Silver | 0.0027 | 0.0029 | 7 |
| Thallium | 0.02780 | 0.02680 | 4 |
| Zinc | 13.1 | 13.2 | 1 |

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86
Metals - Data Qualification Summary - SDG 05D061/K2502714

| SDG | Sample | Analyte | Flag | A or P | Reason |
|---------------------|---|--------------------------------|--|--------|----------------------------|
| 05D061/ K2502714 | 86-S1-110 86-S1-112 86-S1-113 86-S1-114** 86-S1-115 | Arsenic Beryllium Copper | J (all detects) UJ (all non-detects) | A | Matrix spike analysis (%R) |
| 05D061/ K2502714 | 86-S1-114** | Antimony Barium | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | P | Internal standards (%R) |
| 05D061/ K2502714 | 86-S1-110 86-S1-112 86-S1-113 86-S1-114** 86-S1-115 | Antimony Barium | None None | P | Sample result verification |

Moffett Air Field, Site 1, CTO 86
Metals - Laboratory Blank Data Qualification Summary - SDG 05D061/K2502714

| SDG | Sample | Analyte | Modified Final Concentration | A or P |
|---------------------|-------------|---|---|--------|
| 05D061/ K2502714 | 86-S1-110 | Antimony Beryllium Selenium | 0.382U ug/L 0.00386U ug/L 0.48U ug/L | A |
| 05D061/ K2502714 | 86-S1-112 | Antimony Beryllium Selenium Thallium | 0.296U ug/L 0.00479U ug/L 0.68U ug/L 0.00288U ug/L | A |
| 05D061/ K2502714 | 86-S1-113 | Antimony Beryllium Selenium Silver | 0.300U ug/L 0.00216U ug/L 0.46U ug/L 0.0027U ug/L | A |
| 05D061/ K2502714 | 86-S1-114** | Antimony Beryllium Selenium Silver | 0.306U ug/L 0.00121U ug/L 0.52U ug/L 0.0029U ug/L | A |
| 05D061/ K2502714 | 86-S1-115 | Antimony Selenium Silver | 0.414U ug/L 0.84U ug/L 0.0017U ug/L | A |

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

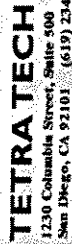
All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

Samples 86-S1-113 and 86-S1-114** were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples.



NUMBER 10351

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management



LABORATORIES, INC.

1835 W. 205th Street

Torrance, CA 90501

Tel: (310) 618-8889

Fax: (310) 618-0818

Date: 05-09-2005

EMAX Batch No.: 05D053

Attn: Lynn Jefferson

Tetra Tech FW, Inc.

1940 E Deere Ave, Suite 200

Santa Ana CA 92705

Subject: Laboratory Report

Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on
04/12/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|--|
| 86-S1-121 | D053-01 | 04/11/05 | WATER | VOLATILE ORGANICS BY GC/MS |
| 86-S1-108 | D053-02 | 04/11/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) DISSOLVED METALS MERCURY DISSOLVED |
| 86-S1-109 | D053-03 | 04/11/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) DISSOLVED METALS MERCURY DISSOLVED SEMIVOLATILE ORGANICS BY GC/MS |

Note: Dissolved Metals was subcontracted to Columbia Analytical Services, Inc.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D053

**SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS**

Three (3) water samples were received on 04/12/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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Client   : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project  : MFA, SITE 1, CTO 86      Date Received: 04/12/05
Batch No. : 05D053                  Date Extracted: 04/15/05 04:11
Sample ID: 86-S1-121                Date Analyzed: 04/15/05 04:11
Lab Samp ID: D053-01                Dilution Factor: 1
Lab File ID: RDC332                 Matrix : WATER
Ext Btch ID: V067025                % Moisture : NA
Calib. Ref.: RCC892                 Instrument ID : T-067
=====
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 1 | 2 |
| 1,1,1-TRICHLOROETHANE | ND | 1 | 2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 1 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 1 | 2 |
| 1,1-DICHLOROETHANE | ND | 1 | 2 |
| 1,1-DICHLOROETHENE | ND | 1 | 2 |
| 1,1-DICHLOROPROPENE | ND | 1 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 1 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 1 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 1 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 1 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 1 | 2 |
| 1,2-DICHLOROBENZENE | ND | 1 | 2 |
| 1,2-DICHLOROETHANE | ND | 1 | 2 |
| 1,2-DICHLOROPROPANE | ND | 1 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 1 | 2 |
| 1,3-DICHLOROBENZENE | ND | 1 | 2 |
| 1,3-DICHLOROPROPANE | ND | 1 | 2 |
| 1,4-DICHLOROBENZENE | ND | 1 | 2 |
| 2,2-DICHLOROPROPANE | ND | 1 | 2 |
| 2-BUTANONE | ND | 1 | 2 |
| 2-CHLOROTOLUENE | ND | 1 | 2 |
| 2-HEXANONE | ND | 1 | 2 |
| 4-CHLOROTOLUENE | ND | 1 | 2 |
| 4-METHYL-2-PENTANONE | ND | 1 | 2 |
| ACETONE | ND | 1 | 2 |
| BENZENE | ND | 1 | 2 |
| BROMOBENZENE | ND | 1 | 2 |
| BROMOCHLOROMETHANE | ND | 1 | 2 |
| BROMODICHLOROMETHANE | ND | 1 | 2 |
| BROMOFORM | ND | 1 | 2 |
| BROMOMETHANE | ND | 1 | 2 |
| CARBON DISULFIDE | ND | 1 | 2 |
| CARBON TETRACHLORIDE | ND | 1 | 2 |
| CHLOROBENZENE | ND | 1 | 2 |
| CHLOROETHANE | ND | 1 | 2 |
| CHLOROFORM | ND | 1 | 2 |
| CHLOROMETHANE | ND | 1 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 1 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 1 | 2 |
| DIBROMOCHLOROMETHANE | ND | 1 | 2 |
| DIBROMOMETHANE | ND | 1 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 1 | 2 |
| ETHYLBENZENE | ND | 1 | 2 |
| HEXACHLOROBUTADIENE | ND | 1 | 2 |
| ISOPROPYL BENZENE | ND | 1 | 2 |
| M/P-XYLENES | ND | 1 | 2 |
| METHYLENE CHLORIDE | ND | 1 | 2 |
| N-BUTYLBENZENE | ND | 1 | 2 |
| N-PROPYLBENZENE | ND | 1 | 2 |
| NAPHTHALENE | ND | 1 | 2 |
| O-XYLENE | ND | 1 | 2 |
| P-ISOPROPYLTOLUENE | ND | 1 | 2 |
| SEC-BUTYLBENZENE | ND | 1 | 2 |
| STYRENE | ND | 1 | 2 |
| TERT-BUTYLBENZENE | ND | 1 | 2 |
| TETRACHLOROETHYLENE | ND | 1 | 2 |
| TOLUENE | ND | 1 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 1 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 1 | 2 |
| TRICHLOROETHENE | ND | 1 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 1 | 2 |
| VINYL CHLORIDE | ND | 1 | 2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 99 | 62-139 |
| TOLUENE-D8 | 109 | 75-125 |
| BROMOFLUOROBENZENE | 110 | 75-125 |

R.L. : Reporting Limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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Client   : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project  : MFA, SITE 1, CTO 86     Date Received: 04/12/05
Batch No.: 05D053                  Date Extracted: 04/15/05 04:48
Sample ID: 86-S1-108               Date Analyzed: 04/15/05 04:48
Lab Samp ID: D053-02               Dilution Factor: 1
Lab File ID: RDC333                Matrix       : WATER
Ext Btch ID: V067D25               % Moisture    : NA
Calib. Ref.: RCC892                Instrument ID : T-067
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 1 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHENE | ND | 5 | 2 |
| 1,1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,2-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 5 | 2 |
| 2-CHLOROTOLUENE | ND | 10 | 5 |
| 2-HEXANONE | ND | 5 | 2 |
| 4-CHLOROTOLUENE | ND | 10 | 5 |
| 4-METHYL-2-PENTANONE | ND | 5 | 2 |
| ACETONE | ND | 10 | 5 |
| BENZENE | ND | 10 | 5 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 5 | 2 |
| BROMOMETHANE | ND | 1 | 5 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 5 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 1 | 5 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 2 |
| ETHYLBENZENE | ND | 1 | 5 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 1 | 5 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 2 |
| VINYL CHLORIDE | ND | 1 | 5 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 116 | 62-139 | |
| TOLUENE-D8 | 104 | 75-125 | |
| BROMOFLUOROBENZENE | 105 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client   : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project  : MFA SITE 1, CTO 86       Date Received: 04/12/05
Batch No.: 05D053                  Date Extracted: 04/15/05 05:25
Sample ID: 86-S1-109               Date Analyzed: 04/15/05 05:25
Lab Samp ID: D053-03                Dilution Factor: 1
Lab File ID: RDC334                 Matrix      : WATER
Ext Btch ID: V067D25                % Moisture   : NA
Calib. Ref.: RCC892                 Instrument ID : T-067
=====
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .2 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .2 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .2 |
| ACETONE | ND | 10 | .2 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | .5 | .2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 113 | 62-139 | |
| TOLUENE-DB | 105 | 75-125 | |
| BROMOFLUOROBENZENE | 106 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis

CASE NARRATIVE

CLIENT: TETRA TECH EMI
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D053

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Two (2) water samples were received on 04/12/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC. Date Collected: 04/11/05
Project : MFA SITE 1, CTO 86 Date Received: 04/12/05
Batch No. : 050053 Date Extracted: 04/16/05 13:00
Sample ID: 86-S1-108 Date Analyzed: 04/19/05 14:54
Lab Smp ID: D053-02 Dilution Factor: .94
Lab File ID: RDH114 Matrix : WATER
Ext. Btch ID: SVD016W % Moisture : NA
Calib. Ref.: RCH307 Instrument ID : 1-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHthalate | ND | 19 | 9.4 |
| BUTYL BENZYLPHthalate | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHthalate | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHthalate | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHthalate | ND | 19 | 5.6 |
| DIMETHYLPHthalate | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROENBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 5.3 |
| ATRAZINE | ND | 19 | 5.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 63 | 25-134 |
| 2-FLUOROBIPHENYL | 56 | 43-123 |
| 2-FLUOROPHENOL | 49 | 25-125 |
| NITROBENZENE-D5 | 54 | 25-125 |
| PHENOL-D5 | 56 | 25-125 |
| TERPHENYL-D14 | 74 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project      : MFA, SITE 1, CTO 86     Date Received: 04/12/05
Batch No.    : 05D053                  Date Extracted: 04/16/05 13:00
Sample ID    : 86-S1-109               Date Analyzed: 04/19/05 15:21
Lab Smp ID   : D053-03                 Dilution Factor: 94
Lab File ID  : RDH115                  Matrix          : WATER
Ext Btch ID  : SVD016W                 % Moisture      : NA
Calib. Ref.  : RCH307                  Instrument ID   : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLORO BENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 74 | 25-134 |
| 2-FLUOROBIPHENYL | 71 | 43-125 |
| 2-FLUOROPHENOL | 67 | 25-125 |
| NITROBENZENE-D5 | 69 | 32-125 |
| PHENOL-D5 | 73 | 25-125 |
| TERPHENYL-D14 | 87 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D053

**SW3520C/8081A
PESTICIDES**

Two (2) water samples were received on 04/12/05 for Pesticides analysis by Method 3520C/8081A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was at five-point for Pesticides, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and mean recoveries were within 85-115%. Endrin and DDT breakdown were within QC limits.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

When sample results are confirmed by a second column, the relative percentage difference (RPD) between the two results is calculated. If RPD is less than 40%, and no evidence of chromatographic problems, the higher result is reported. If RPD is greater than 40%, the chromatogram is checked for anomalies and results are selected based on the best professional judgement. If no evidence of any chromatographic problems, the higher result is reported.

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTD 86      Date Received: 04/12/05
Batch No.   : 05D053                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-108                Date Analyzed: 04/18/05 15:38
Lab Samp ID : D053-02                  Dilution Factor: .94
Lab File ID : SD18010A                 Matrix          : WATER
Ext Btch ID : CPD012W                  % Moisture       : NA
Calib. Ref. : SD18003A                 Instrument ID    : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) ND | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .094 .094 |
| ENDRIN | (ND) ND | .094 | .019 .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |
| | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | 80 (83) | 30-130 | |
| DECACHLOROBIPHENYL | (86) 86 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
 PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/12/05
Batch No.   : 05D053                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-109                  Date Analyzed: 04/18/05 16:04
Lab Samp ID: 0053-03                  Dilution Factor: .95
Lab File ID: SD18011A                 Matrix       : WATER
Ext Btch ID: CPD012W                  % Moisture    : NA
Calib. Ref.: SD18003A                 Instrument ID : GCT008
=====
  
```

| PARAMETERS | RESULTS (ug/L) | | RL (ug/L) | MDL (ug/L) | |
|----------------------|-------------------|------|--------------|---------------|-------|
| ALPHA-BHC | (ND) | ND | .048 | .0095 | .0095 |
| GAMMA-BHC (LINDANE) | (ND) | ND | .048 | .0095 | .0095 |
| BETA-BHC | (ND) | .095 | .048 | .0095 | .0095 |
| HEPTACHLOR | (ND) | ND | .048 | .0095 | .0095 |
| DELTA-BHC | (ND) | ND | .048 | .0095 | .0095 |
| ALDRIN | (ND) | ND | .048 | .0095 | .0095 |
| HEPTACHLOR EPOXIDE | (ND) | ND | .048 | .0095 | .0095 |
| GAMMA-CHLORDANE | (ND) | ND | .048 | .0095 | .0095 |
| ALPHA-CHLORDANE | (ND) | ND | .048 | .0095 | .0095 |
| ENDOSULFAN I | (ND) | ND | .048 | .028 | .028 |
| 4,4'-DDE | (ND) | ND | .095 | .028 | .028 |
| DIELDRIN | (ND) | ND | .19 | .095 | .095 |
| ENDRIN | (ND) | ND | .095 | .019 | .019 |
| 4,4'-DDD | (ND) | ND | .095 | .028 | .028 |
| ENDOSULFAN II | (ND) | ND | .095 | .019 | .019 |
| 4,4'-DDT | (ND) | ND | .095 | .019 | .019 |
| ENDRIN ALDEHYDE | (ND) | ND | .095 | .019 | .019 |
| ENDOSULFAN SULFATE | (ND) | ND | .095 | .019 | .019 |
| ENDRIN KETONE | (ND) | ND | .095 | .019 | .019 |
| METHOXYCHLOR | (ND) | ND | .48 | .095 | .095 |
| TOXAPHENE | (ND) | ND | 2.8 | 1.2 | 1.2 |
| | | | | | |
| SURROGATE PARAMETERS | % RECOVERY | | QC LIMIT | | |
| TETRACHLORO-M-XYLENE | 71 (82) | | 30-130 | | |
| DECACHLOROBIPHENYL | (83) 82 | | 30-130 | | |

RL : Reporting limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D053

**SW3520C/8082
PCBs**

Two (2) water samples were received on 04/12/05 for PCBs analysis by Method 3520C/8082 in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was five points for PCB-1016 and PCB-1260, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and all recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW3520C/8082
PCBs

```
=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/12/05
Batch No.   : 050053                   Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-108                 Date Analyzed: 04/18/05 15:38
Lab Samp ID : D053-02                   Dilution Factor: .94
Lab File ID : SD18010A                  Matrix       : WATER
Ext Btch ID : CPD012W                   % Moisture    : NA
Calib. Ref. : SD18006A                  Instrument ID : GCT008
=====
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (72) 79 | 30-130 |
| DECACHLOROBIPHENYL | (96) 96 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/11/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/12/05
Batch No.   : 05D053                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-109                Date Analyzed: 04/18/05 16:04
Lab Samp ID : D053-03                  Dilution Factor: .95
Lab File ID : SD18011A                 Matrix       : WATER
Ext Btch ID : CPD012W                  % Moisture    : NA
Calib. Ref. : SD18006A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .95 | .24 .24 |
| PCB-1221 | (ND) ND | .95 | .24 .24 |
| PCB-1232 | (ND) ND | .95 | .24 .24 |
| PCB-1242 | (ND) ND | .95 | .24 .24 |
| PCB-1248 | (ND) ND | .95 | .24 .24 |
| PCB-1254 | (ND) ND | .95 | .24 .24 |
| PCB-1260 | (ND) ND | .95 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (65) 75 | 30-130 |
| DECACHLOROBIPHENYL | (92) 91 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.

PROJECT: MFA, STIE 1, CTO 86

SDG: 05D053

**METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR**

Two (2) water samples were received on 04/12/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample D061-02 from another SDG was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Samples were analyzed at DF 20 due to matrix interference.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05D053

Matrix : WATER
Instrument ID : 11047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|-----------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MSLK1W | HGD016WB | ND | 1 | NA | .2 | .1 | 04/20/0517:08 | 04/19/0515:30 | M47D015010 | M47D015008 | HGD016W | NA | 04/19/05 |
| LCS1W | HGD016WL | 4.95 | 1 | NA | .2 | .1 | 04/20/0517:10 | 04/19/0515:30 | M47D015011 | M47D015008 | HGD016W | NA | 04/19/05 |
| LCD1W | HGD016WC | 4.91 | 1 | NA | .2 | .1 | 04/20/0517:12 | 04/19/0515:30 | M47D015012 | M47D015008 | HGD016W | NA | 04/19/05 |
| 86-S1-108 | D053-02 | ND | 20 | NA | 4 | 2 | 04/20/0517:41 | 04/19/0515:30 | M47D015024 | M47D015020 | HGD016W | 04/11/05 | 04/12/05 |
| 86-S1-109 | D053-03 | ND | 20 | NA | 4 | 2 | 04/20/0517:43 | 04/19/0515:30 | M47D015025 | M47D015020 | HGD016W | 04/11/05 | 04/12/05 |

RL: Reporting Limit

7003

COLUMBIA ANALYTICAL SERVICES, INC.

| | | | |
|-----------------------|-------------------------|-----------------------------|------------|
| Client: | EMAX Laboratories, Inc. | Service Request No.: | K2502714 |
| Project: | Moffett Site 1 | Date Received: | 4/14-15/05 |
| Sample Matrix: | Water | | |

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Twelve water samples were received for analysis at Columbia Analytical Services between 4/14-15/05. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Metals

Sample Notes and Discussion:

Due to the high salinity of sample matrix, all samples required pre-treatment using reductive precipitation prior to analysis by ICP/MS EPA 200.8. Analysis of Selenium was performed by hydride EPA 7742 due to the saline sample matrix.

Matrix Spike Recovery Exceptions:

The matrix spike recoveries of Arsenic (56%), Beryllium (69%), and Copper (73%) for sample 86-S1-110 were outside the project specified control criteria of 75-125%. All the recoveries were within the CAS statistically derived limits for the reductive precipitation procedure (As 50-145%, Be 50-123% and Cu 50-120%). Based on the CAS statistical control limits, the recoveries observed are in the range expected for this procedure. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

The control criteria for matrix spike recoveries of Cobalt and Nickel for sample 86-S1-110 are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____

ami spate

Date _____

5/5/05

Columbia Analytical Services
DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-108

Lab Code: K2502714-001 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.396 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.834 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 73.3 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00426 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.4120 | | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.053 | B | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 13.5 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.6020 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.127 | | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 22.5 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.46 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.1920 | | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.08090 | | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 3.270 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-109

Lab Code: K2502714-002 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.304 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 4.610 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 145 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00883 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0025 | B | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.515 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 1.9100 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.2050 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.020 | B | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 6.230 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.46 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0013 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00210 | B | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.913 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-110

Lab Code: K2502714-003 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.382 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 2.200 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 83.8 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00386 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.4770 | | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.203 | B | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 9.9300 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.8140 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.042 | | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 12.7 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.48 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0273 | | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.07190 | | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 2.520 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-112

Lab Code: K2502714-004 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.296 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 4.540 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 184 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00479 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0122 | B | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.580 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 6.0100 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.2250 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.037 | | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 7.080 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.68 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0243 | | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00288 | B | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.3 | B | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 1.340 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-113

Lab Code: K2502714-005 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.300 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 1.550 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 74.3 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00216 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.2700 | | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.375 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 4.6700 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.5280 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.012 | B | |
| Nickel | 200.8 | 2.220 | 0.022 | 10 | 4/28/05 | 4/29/05 | 87.9 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.46 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0027 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.02780 | | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 13.1 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-114

Lab Code: K2502714-006 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.306 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 1.630 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 73.4 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00121 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.2940 | | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.283 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 6.3700 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.5730 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.013 | B | |
| Nickel | 200.8 | 2.220 | 0.022 | 10 | 4/28/05 | 4/29/05 | 99.0 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.52 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0029 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.02680 | | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 13.2 | | |

* Solids: 0.0

Comments:

Columbia Analytical Services

 DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/11/05

Project Name: Moffett Site 1

Date Received: 04/14/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-115

Lab Code: K2502714-007 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.414 | B | |
| Arsenic | 200.8 | 1.110 | 0.004 | 2 | 4/28/05 | 4/29/05 | 2.760 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 208 | | |
| Beryllium | 200.8 | 0.04440 | 0.00018 | 2 | 4/28/05 | 4/29/05 | 0.01100 | B | N |
| Cadmium | 200.8 | 0.0444 | 0.0007 | 2 | 4/28/05 | 4/29/05 | 0.0007 | U | |
| Chromium | 200.8 | 0.444 | 0.004 | 2 | 4/28/05 | 4/29/05 | 26.0 | | |
| Cobalt | 200.8 | 0.0444 | 0.0004 | 2 | 4/28/05 | 4/29/05 | 4.3300 | | |
| Copper | 200.8 | 0.2220 | 0.0018 | 2 | 4/28/05 | 4/29/05 | 0.8310 | | N |
| Lead | 200.8 | 0.044 | 0.002 | 2 | 4/28/05 | 4/29/05 | 0.100 | | |
| Nickel | 200.8 | 2.220 | 0.022 | 10 | 4/28/05 | 4/29/05 | 497 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.84 | B | |
| Silver | 200.8 | 0.0444 | 0.0011 | 2 | 4/28/05 | 4/29/05 | 0.0017 | B | |
| Thallium | 200.8 | 0.04440 | 0.00013 | 2 | 4/28/05 | 4/29/05 | 0.00013 | U | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 1.110 | 0.004 | 2 | 4/28/05 | 4/29/05 | 9.220 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/12/05

Project Name: Moffett Site 1

Date Received: 04/15/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-116

Lab Code: K2502714-008 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.214 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 1.050 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 507 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00118 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0003 | U | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.366 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 1.2800 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.1420 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.007 | B | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 4.020 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.44 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0006 | U | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00007 | U | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.529 | B | |

‡ Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/12/05

Project Name: Moffett Site 1

Date Received: 04/15/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-117

Lab Code: K2502714-009 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.204 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 2.090 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 130 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00052 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0383 | | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.263 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 2.7400 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.3290 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.007 | B | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 5.410 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.48 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0150 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00007 | U | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 6.460 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/12/05

Project Name: Moffett Site 1

Date Received: 04/15/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-118

Lab Code: K2502714-010 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.202 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 1.770 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 130 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00009 | U | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0413 | | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.257 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 2.4000 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.4340 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.020 | B | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 5.270 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.46 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0151 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00007 | U | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 7.150 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services
DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/13/05

Project Name: Moffett Site 1

Date Received: 04/15/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-119

Lab Code: K2502714-011 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 2.000 | 0.240 | 2 | 4/21/05 | 4/25/05 | 0.252 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 6.350 | | N |
| Barium | 200.8 | 2.00 | 1.20 | 2 | 4/21/05 | 4/25/05 | 218 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00817 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0056 | B | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 1.190 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 6.2900 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.2430 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.014 | B | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 12.2 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.44 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0031 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00007 | U | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.5 | B | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.792 | | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected: 04/13/05

Project Name: Moffett Site 1

Date Received: 04/15/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-120

Lab Code: K2502714-012 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.312 | B | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 5.430 | | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 244 | | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00612 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0003 | U | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.376 | | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 4.9900 | | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.2140 | | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.011 | B | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 13.2 | | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.54 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0029 | B | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00007 | U | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 7.1 | B | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.460 | B | |

% Solids: 0.0

Comments:

Columbia Analytical Services

DISSOLVED METALS
 -1-
 INORGANIC ANALYSIS DATA SHEET

Client: EMAX Laboratories, Inc.

Service Request: K2502714

Project No.: NA

Date Collected:

Project Name: Moffett Site 1

Date Received:

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: Method Blank

Lab Code: K2502714-MB

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|---------|---------|------|----------------|---------------|---------|---|---|
| Aluminum | 6010B | 50 | 50 | 1 | 4/21/05 | 4/25/05 | 50 | U | |
| Antimony | 200.8 | 1.000 | 0.120 | 1 | 4/21/05 | 4/25/05 | 0.120 | U | |
| Arsenic | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.002 | U | N |
| Barium | 200.8 | 1.00 | 0.60 | 1 | 4/21/05 | 4/25/05 | 0.60 | U | |
| Beryllium | 200.8 | 0.02220 | 0.00009 | 1 | 4/28/05 | 4/29/05 | 0.00009 | B | N |
| Cadmium | 200.8 | 0.0222 | 0.0003 | 1 | 4/28/05 | 4/29/05 | 0.0003 | U | |
| Chromium | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.002 | U | |
| Cobalt | 200.8 | 0.0222 | 0.0002 | 1 | 4/28/05 | 4/29/05 | 0.0002 | U | |
| Copper | 200.8 | 0.1110 | 0.0009 | 1 | 4/28/05 | 4/29/05 | 0.0010 | B | N |
| Lead | 200.8 | 0.022 | 0.001 | 1 | 4/28/05 | 4/29/05 | 0.001 | U | |
| Nickel | 200.8 | 0.222 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.031 | B | |
| Selenium | 7742 | 1.00 | 0.30 | 2 | 4/21/05 | 5/2/05 | 0.74 | B | |
| Silver | 200.8 | 0.0222 | 0.0006 | 1 | 4/28/05 | 4/29/05 | 0.0006 | U | |
| Thallium | 200.8 | 0.02220 | 0.00007 | 1 | 4/28/05 | 4/29/05 | 0.00027 | B | |
| Vanadium | 6010B | 10.0 | 6.0 | 1 | 4/21/05 | 4/25/05 | 6.0 | U | |
| Zinc | 200.8 | 0.556 | 0.002 | 1 | 4/28/05 | 4/29/05 | 0.006 | B | |

% Solids: 0.0

Comments:

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Volatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D053

Sample Identification

86-S1-121
86-S1-108
86-S1-109**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for all individual compounds.

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

For the purposes of technical evaluation, all compounds were evaluated against the 20.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample 86-S1-121 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Airfield, MFA Site 1, CTO 86
Volatiles - Data Qualification Summary - SDG 05D053

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05D053

No Sample Data Qualified in this SDG

LDC Report# 13504A2

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Semivolatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D053

Sample Identification

86-S1-108
86-S1-109**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05D053

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05D053

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Chlorinated Pesticides
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 05D053

Sample Identification

86-S1-108
86-S1-109**

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

The individual 4,4'-DDT and Endrin breakdowns were less than 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

— No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 11, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Polychlorinated Biphenyls
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D053

Sample Identification

86-S1-108
86-S1-109**

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance data were not provided and therefore not reviewed.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Polychlorinated Biphenyls - Data Qualification Summary - SDG 05D053

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 05D053

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Air Field, Site 1, CTO 86
Collection Date: April 11, 2005
LDC Report Date: May 23, 2005
Matrix: Water
Parameters: Metals
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc./Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): 05D053/K2502714

Sample Identification

86-S1-108
86-S1-109**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B and 7000 and EPA Method 200.8 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|-----------------|--|--|------------------------------------|
| PB (prep blank) | Beryllium Copper Nickel Selenium Thallium Zinc | 0.00009 ug/L 0.0010 ug/L 0.031 ug/L 0.74 ug/L 0.00027 ug/L 0.006 ug/L | All samples in SDG 05D053/K2502714 |
| ICB/CCB | Antimony | 0.012 ug/L | 86-S1-108 |
| ICB/CCB | Beryllium Cadmium Cobalt Nickel Selenium Silver Thallium | 0.02 ug/L 0.02 ug/L 0.0050 ug/L 0.495 ug/L 0.28 ug/L 0.01 ug/L 0.05 ug/L | All samples in SDG 05D053/K2502714 |
| ICB/CCB | Antimony | 0.014 ug/L | 86-S1-109** |

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|-------------|--|---|---|
| 86-S1-108 | Antimony Beryllium Selenium | 0.396 ug/L 0.00426 ug/L 0.46 ug/L | 0.396U ug/L 0.00426U ug/L 0.46U ug/L |
| 86-S1-109** | Antimony Beryllium Cadmium Selenium Silver Thallium | 0.304 ug/L 0.00883 ug/L 0.0025 ug/L 0.46 ug/L 0.0013 ug/L 0.00210 ug/L | 0.304U ug/L 0.00883U ug/L 0.0025U ug/L 0.46U ug/L 0.0013U ug/L 0.00210U ug/L |

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | %R (Limits) | Flag | A or P |
|--|--------------------------------|---|---|--------|
| 86-S1-110MS (All samples in SDG USD053/K2502714) | Arsenic Beryllium Copper | 56 (75-125) 69 (75-125) 73 (75-125) | J (all detects) UU (all non-detects) | A |

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

All internal standard percent recoveries (%R) were within QC limits for samples on which a EPA Level IV review was performed with the following exceptions:

| Sample | Internal Standard | %R (Limits) | Analyte | Flag | A or P |
|-------------|---|--|--|---|--------|
| 86-S1-109** | Nickel-61 Indium-115 (4/29/05) Indium-115 (4/25/05) | 253.6 (60-125) 143 (60-125) 148.5 (60-125) | Nickel Arsenic Cadmium Chromium Cobalt Copper Silver Zinc Antimony Barium | J (all detects) UJ (all non-detects) | P |

Raw data were not evaluated for the samples reviewed by Level III criteria.

IX. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for samples reviewed by Level III criteria.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

All sample result verification met validation criteria with the following exceptions:

| Sample | Analyte | Finding | Criteria | Flag | A or P |
|------------------------------------|----------|--|---|------|--------|
| All samples in SDG 05D053/K2502714 | Antimony | Laboratory method detection limit reported at 0.12 ug/L. | MDL should be reported at 0.05 ug/L per the QAPP. 0.11 | None | P |
| All samples in SDG 05D053/K2502714 | Barium | Laboratory method detection limit reported at 0.60 ug/L. | MDL should be reported at 0.05 ug/L per the QAPP. 0.18 | None | P |

Raw data were not evaluated for samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86
Metals - Data Qualification Summary - SDG 05D053/K2502714

| SDG | Sample | Analyte | Flag | A or P | Reason |
|---------------------|--------------------------|--|---|--------|----------------------------|
| 05D053/ K2502714 | 86-S1-108 86-S1-109** | Arsenic Beryllium Copper | J (all detects) UJ (all non-detects) | A | Matrix spike analysis (%R) |
| 05D053/ K2502714 | 86-S1-109** | Nickel Arsenic Cadmium Chromium Cobalt Copper Silver Zinc Antimony Barium | J (all detects) UJ (all non-detects) | P | Internal standards (%R) |
| 05D053/ K2502714 | 86-S1-108 86-S1-109** | Antimony Barium | None None | P | Sample result verification |

Moffett Air Field, Site 1, CTO 86
Metals - Laboratory Blank Data Qualification Summary - SDG 05D053/K2502714

| SDG | Sample | Analyte | Modified Final Concentration | A or P |
|---------------------|-------------|--|---|--------|
| 05D053/ K2502714 | 86-S1-108 | Antimony Beryllium Selenium | 0.396U ug/L 0.00426U ug/L 0.46U ug/L | A |
| 05D053/ K2502714 | 86-S1-109** | Antimony Beryllium Cadmium Selenium Silver Thallium | 0.304U ug/L 0.00883U ug/L 0.0025U ug/L 0.46U ug/L 0.0013U ug/L 0.00210U ug/L | A |



1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10359

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Canary - Data Management



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501

Tel: (310) 618-8889

Fax: (310) 618-0818

Date: 05-09-2005
EMAX Batch No.: 050068

Attn: Lynn Jefferson

Tetra Tech FW, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705Subject: Laboratory Report
Project: MFA, Site 1, CTO 86-----
Enclosed is the Laboratory report for samples received on
04/14/05. The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|---|
| 86-S1-123 | D068-01 | 04/12/05 | WATER | VOLATILE ORGANICS BY GC/MS |
| 86-S1-116 | D068-02 | 04/12/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-117 | D068-03 | 04/12/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW SEMIVOLATILE ORGANICS BY GCMS |
| 86-S1-118 | D068-04 | 04/12/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW SEMIVOLATILE ORGANICS BY GCMS |

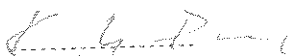
| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|--|
| 86-S1-119 | D068-05 | 04/13/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW SEMIVOLATILE ORGANICS BY GC/MS |
| 86-S1-120 | D068-06 | 04/13/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED MT2008DW SEMIVOLATILE ORGANICS BY GC/MS |

Note: Results for Dissolved Metals which were subcontracted to Columbia Analytical Services, Inc. may be found in SDG 050053.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,



Kam Y. Pang, Ph.D.
Laboratory Director

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CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D068

**SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS**

Six (6) water samples were received on 04/14/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 50308/82608
 VOLATILE ORGANICS BY GC/MS

```

=====
Client   : TETRA TECH FW INC.
Project  : MFA SITE 1, CTO 86
Batch No.: 05D068
Sample ID: 86-S1-123
Lab Samp ID: DQ68-01
Lab File ID: RDQ345
Ext Btch ID: V005030
Calib. Ref.: RDQ221

Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/19/05 04:22
Date Analyzed: 04/19/05 04:22
Dilution Factor: 1
Matrix: WATER
% Moisture: NA
Instrument ID: T-005
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 1.0 | 1.0 |
| 1,1,1-TRICHLOROETHANE | ND | 1.0 | 1.0 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 1.0 | 1.0 |
| 1,1,2-TRICHLOROETHANE | ND | 1.0 | 1.0 |
| 1,1-DICHLOROETHANE | ND | 1.0 | 1.0 |
| 1,1-DICHLOROETHENE | ND | 1.0 | 1.0 |
| 1,1-DICHLOROPROPENE | ND | 1.0 | 1.0 |
| 1,2,3-TRICHLOROBENZENE | ND | 1.0 | 1.0 |
| 1,2,3-TRICHLOROPROPANE | ND | 1.0 | 1.0 |
| 1,2,4-TRICHLOROBENZENE | ND | 1.0 | 1.0 |
| 1,2,4-TRIMETHYLBENZENE | ND | 1.0 | 1.0 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 1.0 | 1.0 |
| 1,2-DICHLOROBENZENE | ND | 1.0 | 1.0 |
| 1,2-DICHLOROETHANE | ND | 1.0 | 1.0 |
| 1,2-DICHLOROPROPANE | ND | 1.0 | 1.0 |
| 1,3,5-TRIMETHYLBENZENE | ND | 1.0 | 1.0 |
| 1,3-DICHLOROBENZENE | ND | 1.0 | 1.0 |
| 1,3-DICHLOROPROPANE | ND | 1.0 | 1.0 |
| 1,4-DICHLOROBENZENE | ND | 1.0 | 1.0 |
| 2,2-DICHLOROPROPANE | ND | 1.0 | 1.0 |
| 2-BUTANONE | ND | 1.0 | 1.0 |
| 2-CHLOROTOLUENE | ND | 1.0 | 1.0 |
| 2-HEXANONE | ND | 1.0 | 1.0 |
| 4-CHLOROTOLUENE | ND | 1.0 | 1.0 |
| 4-METHYL-2-PENTANONE | ND | 1.0 | 1.0 |
| ACETONE | ND | 1.0 | 1.0 |
| BENZENE | ND | 1.0 | 1.0 |
| BROMOBENZENE | ND | 1.0 | 1.0 |
| BROMOCHLOROMETHANE | ND | 1.0 | 1.0 |
| BROMODICHLOROMETHANE | ND | 1.0 | 1.0 |
| BROMOFORM | ND | 1.0 | 1.0 |
| BROMOMETHANE | ND | 1.0 | 1.0 |
| CARBON DISULFIDE | ND | 1.0 | 1.0 |
| CARBON TETRACHLORIDE | ND | 1.0 | 1.0 |
| CHLOROBENZENE | ND | 1.0 | 1.0 |
| CHLOROETHANE | ND | 1.0 | 1.0 |
| CHLOROFORM | ND | 1.0 | 1.0 |
| CHLOROMETHANE | ND | 1.0 | 1.0 |
| CIS-1,2-DICHLOROETHENE | ND | 1.0 | 1.0 |
| CIS-1,3-DICHLOROPROPENE | ND | 1.0 | 1.0 |
| DIBROMOCHLOROMETHANE | ND | 1.0 | 1.0 |
| DIBROMOMETHANE | ND | 1.0 | 1.0 |
| DICHLORODIFLUOROMETHANE | ND | 1.0 | 1.0 |
| ETHYLBENZENE | ND | 1.0 | 1.0 |
| HEXACHLOROBTADIENE | ND | 1.0 | 1.0 |
| ISOPROPYL BENZENE | ND | 1.0 | 1.0 |
| M/P-XYLENES | ND | 1.0 | 1.0 |
| METHYLENE CHLORIDE | ND | 1.0 | 1.0 |
| N-BUTYLBENZENE | ND | 1.0 | 1.0 |
| N-PROPYLBENZENE | ND | 1.0 | 1.0 |
| NAPHTHALENE | ND | 1.0 | 1.0 |
| O-XYLENE | ND | 1.0 | 1.0 |
| P-ISOPROPYLTOLUENE | ND | 1.0 | 1.0 |
| SEC-BUTYLBENZENE | ND | 1.0 | 1.0 |
| STYRENE | ND | 1.0 | 1.0 |
| TERT-BUTYLBENZENE | ND | 1.0 | 1.0 |
| TETRACHLOROETHYLENE | ND | 1.0 | 1.0 |
| TOLUENE | ND | 1.0 | 1.0 |
| TRANS-1,2-DICHLOROETHENE | ND | 1.0 | 1.0 |
| TRANS-1,3-DICHLOROPROPENE | ND | 1.0 | 1.0 |
| TRICHLOROETHENE | ND | 1.0 | 1.0 |
| TRICHLOROFLUOROMETHANE | ND | 1.0 | 1.0 |
| VINYL CHLORIDE | ND | 1.0 | 1.0 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 100 | 62-139 | |
| TOLUENE-D8 | 104 | 75-125 | |
| BROMOFLUOROBENZENE | 103 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
 VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86     Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/19/05 04:59
Sample ID   : 86-S1-116               Date Analyzed: 04/19/05 04:59
Lab Samp ID : D068-02                 Dilution Factor: 1
Lab File ID : RDQ346                  Matrix : WATER
Ext Btch ID : V005030                 % Moisture : NA
Calib. Ref. : RDQ221                  Instrument ID : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 3 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 3 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 3 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 3 |
| 1,1-DICHLOROETHANE | ND | 5 | 3 |
| 1,1-DICHLOROETHENE | ND | 5 | 3 |
| 1,1-DICHLOROPROPENE | ND | 5 | 3 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 3 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 3 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 3 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 3 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 3 |
| 1,2-DICHLOROBENZENE | ND | 5 | 3 |
| 1,2-DICHLOROETHANE | ND | 5 | 3 |
| 1,2-DICHLOROPROPANE | ND | 5 | 3 |
| 1,2,5-TRIMETHYLBENZENE | ND | 5 | 3 |
| 1,3-DICHLOROBENZENE | ND | 5 | 3 |
| 1,3-DICHLOROPROPANE | ND | 5 | 3 |
| 1,4-DICHLOROBENZENE | ND | 5 | 3 |
| 2,2-DICHLOROPROPANE | ND | 5 | 3 |
| 2-BUTANONE | ND | 5 | 3 |
| 2-CHLOROTOLUENE | ND | 5 | 3 |
| 2-HEXANONE | ND | 5 | 3 |
| 4-CHLOROTOLUENE | ND | 5 | 3 |
| 4-METHYL-2-PENTANONE | ND | 5 | 3 |
| ACETONE | ND | 5 | 3 |
| BENZENE | ND | 5 | 3 |
| BROMOBENZENE | ND | 5 | 3 |
| BROMOCHLOROMETHANE | ND | 5 | 3 |
| BROMODICHLOROMETHANE | ND | 5 | 3 |
| BROMOFORM | ND | 5 | 3 |
| BROMOMETHANE | ND | 5 | 3 |
| CARBON DISULFIDE | ND | 5 | 3 |
| CARBON TETRACHLORIDE | ND | 5 | 3 |
| CHLOROBENZENE | ND | 5 | 3 |
| CHLOROETHANE | ND | 5 | 3 |
| CHLOROFORM | ND | 5 | 3 |
| CHLOROMETHANE | ND | 5 | 3 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 3 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 3 |
| DIBROMOCHLOROMETHANE | ND | 5 | 3 |
| DIBROMOMETHANE | ND | 5 | 3 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 3 |
| ETHYLBENZENE | ND | 5 | 3 |
| HEXACHLOROBUTADIENE | ND | 5 | 3 |
| ISOPROPYL BENZENE | ND | 5 | 3 |
| M/P-XYLENES | ND | 5 | 3 |
| METHYLENE CHLORIDE | ND | 5 | 3 |
| N-BUTYLBENZENE | ND | 5 | 3 |
| N-PROPYLBENZENE | ND | 5 | 3 |
| NAPHTHALENE | ND | 5 | 3 |
| O-XYLENE | ND | 5 | 3 |
| P-ISOPROPYLTOLUENE | ND | 5 | 3 |
| SEC-BUTYLBENZENE | ND | 5 | 3 |
| STYRENE | ND | 5 | 3 |
| TERT-BUTYLBENZENE | ND | 5 | 3 |
| TETRACHLOROETHYLENE | ND | 5 | 3 |
| TOLUENE | ND | 5 | 3 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 3 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 3 |
| TRICHLOROETHENE | ND | 5 | 3 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 3 |
| VINYL CHLORIDE | ND | 5 | 3 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 115 | 62-139 | |
| TOLUENE-D8 | 100 | 75-125 | |
| BROMOFLUOROBENZENE | 95 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05D068
Sample ID   : 86-S1-117
Lab Smp ID  : D068-03
Lab File ID : RD0347
Ext Btch ID : V005D30
Calib. Ref. : RD0221
=====
Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/19/05 05:36
Date Analyzed: 04/19/05 05:36
Dilution Factor: 1
Matrix: WATER
% Moisture: NA
Instrument ID: T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 1 | 1 |
| 1,1,1-TRICHLOROETHANE | ND | 1 | 1 |
| 1,1,2-2-TETRACHLOROETHANE | ND | 1 | 1 |
| 1,1,2-TRICHLOROETHANE | ND | 1 | 1 |
| 1,1-DICHLOROETHANE | ND | 1 | 1 |
| 1,1-DICHLOROETHENE | ND | 1 | 1 |
| 1,1-DICHLOROPROPENE | ND | 1 | 1 |
| 1,2,3-TRICHLOROBENZENE | ND | 1 | 1 |
| 1,2,3-TRICHLOROPROPANE | ND | 1 | 1 |
| 1,2,4-TRICHLOROBENZENE | ND | 1 | 1 |
| 1,2,4-TRIMETHYLBENZENE | ND | 1 | 1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 1 | 1 |
| 1,2-DICHLOROBENZENE | ND | 1 | 1 |
| 1,2-DICHLOROETHANE | ND | 1 | 1 |
| 1,2-DICHLOROPROPANE | ND | 1 | 1 |
| 1,3,5-TRIMETHYLBENZENE | ND | 1 | 1 |
| 1,3-DICHLOROBENZENE | ND | 1 | 1 |
| 1,3-DICHLOROPROPANE | ND | 1 | 1 |
| 1,4-DICHLOROBENZENE | ND | 1 | 1 |
| 2,2-DICHLOROPROPANE | ND | 1 | 1 |
| 2-BUTANONE | ND | 1 | 1 |
| 2-CHLOROTOLUENE | ND | 1 | 1 |
| 2-HEXANONE | ND | 1 | 1 |
| 4-CHLOROTOLUENE | ND | 1 | 1 |
| 4-METHYL-2-PENTANONE | ND | 1 | 1 |
| ACETONE | ND | 1 | 1 |
| BENZENE | ND | 1 | 1 |
| BROMOBENZENE | ND | 1 | 1 |
| BROMOCHLOROMETHANE | ND | 1 | 1 |
| BROMODICHLOROMETHANE | ND | 1 | 1 |
| BROMOFORM | ND | 1 | 1 |
| BROMOMETHANE | ND | 1 | 1 |
| CARBON DISULFIDE | ND | 1 | 1 |
| CARBON TETRACHLORIDE | ND | 1 | 1 |
| CHLOROBENZENE | ND | 1 | 1 |
| CHLOROETHANE | ND | 1 | 1 |
| CHLOROFORM | ND | 1 | 1 |
| CHLOROMETHANE | ND | 1 | 1 |
| CIS-1,2-DICHLOROETHENE | ND | 1 | 1 |
| CIS-1,3-DICHLOROPROPENE | ND | 1 | 1 |
| DIBROMOCHLOROMETHANE | ND | 1 | 1 |
| DIBROMOMETHANE | ND | 1 | 1 |
| DICHLORODIFLUOROMETHANE | ND | 1 | 1 |
| ETHYLBENZENE | ND | 1 | 1 |
| HEXACHLOROBUTADIENE | ND | 1 | 1 |
| ISOPROPYL BENZENE | ND | 1 | 1 |
| M/P-XYLENES | ND | 1 | 1 |
| METHYLENE CHLORIDE | ND | 1 | 1 |
| N-BUTYLBENZENE | ND | 1 | 1 |
| N-PROPYLBENZENE | ND | 1 | 1 |
| NAPHTHALENE | ND | 1 | 1 |
| O-XYLENE | ND | 1 | 1 |
| P-ISOPROPYLTOLUENE | ND | 1 | 1 |
| SEC-BUTYLBENZENE | ND | 1 | 1 |
| STYRENE | ND | 1 | 1 |
| TERT-BUTYLBENZENE | ND | 1 | 1 |
| TETRACHLOROETHYLENE | ND | 1 | 1 |
| TOLUENE | ND | 1 | 1 |
| TRANS-1,2-DICHLOROETHENE | ND | 1 | 1 |
| TRANS-1,3-DICHLOROPROPENE | ND | 1 | 1 |
| TRICHLOROETHENE | ND | 1 | 1 |
| TRICHLOROFUOROMETHANE | ND | 1 | 1 |
| VINYL CHLORIDE | ND | 1 | 1 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 114 | 62-139 | |
| TOLUENE-D8 | 99 | 75-125 | |
| BROMOFLUOROBENZENE | 94 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

2006

SW 50308/82608
 VOLATILE ORGANICS BY GC/MS

| | |
|-------------------------------|--------------------------------|
| Client : TETRA TECH FW, INC. | Date Collected: 04/12/05 |
| Project : MFA, SITE 1, CTO 86 | Date Received: 04/14/05 |
| Batch No. : 050068 | Date Extracted: 04/19/05 06:13 |
| Sample ID: 86-31-118 | Date Analyzed: 04/19/05 06:13 |
| Lab Samp ID: 0068-04 | Dilution Factor: 1 |
| Lab File ID: RDQ348 | Matrix : WATER |
| Ext Btch ID: V005030 | % Moisture : NA |
| Calib. Ref.: RDQ221 | Instrument ID : T-005 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,2,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHENE | ND | 5 | 2 |
| 1,1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,2-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 5 | 2 |
| 2-CHLOROTOLUENE | ND | 5 | 2 |
| 2-HEXANONE | ND | 5 | 2 |
| 4-CHLOROTOLUENE | ND | 5 | 2 |
| 4-METHYL-2-PENTANONE | 4.4J | 10 | 2 |
| ACETONE | ND | 5 | 2 |
| BENZENE | ND | 5 | 2 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 5 | 2 |
| BROMOMETHANE | ND | 5 | 2 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 5 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 5 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 2 |
| ETHYLBENZENE | ND | 5 | 2 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 5 | 2 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 2 |
| VINYL CHLORIDE | ND | 5 | 2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 115 | 62-139 | |
| TOLUENE-D8 | 100 | 75-125 | |
| BROMOFLUOROBENZENE | 95 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

=====
Client : TETRA TECH FW, INC. Date Collected: 04/13/05
Project : MFA, SITE 1, CTO 86 Date Received: 04/14/05
Batch No. : 050068 Date Extracted: 04/19/05 06:50
Sample ID: 86-S1-119 Date Analyzed: 04/19/05 06:50
Lab Samp ID: 0968-05 Dilution Factor: 1
Lab File ID: RD0349 Matrix : WATER
Ext Btch ID: V005030 % Moisture : NA
Calib. Ref.: RDQ221 Instrument ID : T-005
=====

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,2,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1-DICHLOROETHENE | ND | 5 | 2 |
| 1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,2-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 5 | 2 |
| 2-CHLOROTOLUENE | ND | 5 | 2 |
| 2-HEXANONE | ND | 5 | 2 |
| 4-CHLOROTOLUENE | ND | 5 | 2 |
| 4-METHYL-2-PENTANONE | 5.5J | 10 | 2 |
| ACETONE | ND | 5 | 2 |
| BENZENE | ND | 5 | 2 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 5 | 2 |
| BROMOMETHANE | ND | 5 | 2 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 5 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 5 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 2 |
| ETHYLBENZENE | ND | 5 | 2 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 5 | 2 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 2 |
| VINYL CHLORIDE | ND | 5 | 2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 120 | 62-139 | |
| TOLUENE-D8 | 99 | 75-125 | |
| BROMOFLUOROBENZENE | 95 | 75-125 | |

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA SITE 1, CTO 86
Batch No. : 05D068
Sample ID: 86-S1-120
Lab Samp ID: 0068-06
Lab File ID: R00350
Ext Btch ID: V005030
Calib. Ref.: R00221

Date Collected: 04/13/05
Date Received: 04/14/05
Date Extracted: 04/19/05 07:26
Date Analyzed: 04/19/05 07:26
Dilution Factor: 1
Matrix : WATER
% Moisture : NA
Instrument ID : T-005

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,2,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1-DICHLOROETHENE | ND | 5 | 2 |
| 1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,2-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 5 | 2 |
| 2-CHLOROTOLUENE | ND | 5 | 2 |
| 2-HEXANONE | ND | 5 | 2 |
| 4-CHLOROTOLUENE | ND | 5 | 2 |
| 4-METHYL-2-PENTANONE | ND | 5 | 2 |
| ACETONE | ND | 5 | 2 |
| BENZENE | ND | 5 | 2 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 5 | 2 |
| BROMOMETHANE | ND | 5 | 2 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 5 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 5 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 2 |
| ETHYLBENZENE | ND | 5 | 2 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 5 | 2 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFUOROMETHANE | ND | 5 | 2 |
| VINYL CHLORIDE | ND | 5 | 2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 118 | 62-139 |
| TOLUENE-D8 | 98 | 75-125 |
| BROMOFLUOROBENZENE | 94 | 75-125 |

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D068

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Five (5) water samples were received on 04/14/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 050068
Sample ID: 86-S1-116
Lab Samp ID: D068-02
Lab File ID: RDH123
Ext Btch ID: SVD016W
Calib. Ref.: RCH307

Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/16/05 13:00
Date Analyzed: 04/19/05 10:03
Dilution Factor: 95
Matrix : WATER
% Moisture : NA
Instrument ID : T-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 0.5 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 0.5 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 0.5 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 1.0 | 9.5 |
| 2,4-DINITROPHENOL | ND | 1.0 | 9.5 |
| 2,4-DINITROTOLUENE | ND | 1.0 | 5.7 |
| 2,6-DINITROTOLUENE | ND | 0.5 | 4.8 |
| 2-CHLORONAPHTHALENE | ND | 0.5 | 4.8 |
| 2-CHLOROPHENOL | ND | 0.5 | 4.8 |
| 2-METHYLNAPHTHALENE | ND | 0.5 | 5.7 |
| 2-METHYLPHENOL | ND | 1.0 | 4.8 |
| 2-NITROANILINE | ND | 0.5 | 4.8 |
| 2-NITROPHENOL | ND | 0.5 | 4.8 |
| 3,3'-DICHLOROBENZIDINE | ND | 1.0 | 9.5 |
| 3-NITROANILINE | ND | 1.0 | 6.6 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 0.5 | 4.8 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 0.5 | 4.8 |
| 4-CHLORO-3-METHYLPHENOL | ND | 0.5 | 4.8 |
| 4-CHLOROANILINE | ND | 0.5 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 0.5 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 1.0 | 4.8 |
| 4-NITROANILINE | ND | 0.5 | 4.8 |
| 4-NITROPHENOL | ND | 0.5 | 4.8 |
| ACENAPHTHENE | ND | 0.5 | 4.8 |
| ACENAPHTHYLENE | ND | 0.5 | 4.8 |
| ANTHRACENE | ND | 0.5 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 0.5 | 4.8 |
| BENZO(A)PYRENE | ND | 0.5 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 0.5 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 0.5 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 0.5 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 0.5 | 9.5 |
| BIS(2-CHLOROETHYL)ETHER | ND | 0.5 | 4.8 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 0.5 | 4.8 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 0.5 | 4.8 |
| BUTYLBENZYLPHTHALATE | ND | 0.5 | 4.8 |
| CHRYSENE | ND | 0.5 | 4.8 |
| DI-N-BUTYLPHTHALATE | ND | 0.5 | 4.8 |
| DI-N-OCTYLPHTHALATE | ND | 0.5 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 1.0 | 5.7 |
| DIBENZOFURAN | ND | 1.0 | 4.8 |
| DIETHYLPHTHALATE | ND | 0.5 | 4.8 |
| DIMETHYLPHTHALATE | ND | 0.5 | 4.8 |
| FLUORANTHENE | ND | 1.0 | 5.7 |
| FLUORENE | ND | 0.5 | 4.8 |
| HEXACHLOROBENZENE | ND | 0.5 | 4.8 |
| HEXACHLOROCYCLOPENTADIENE | ND | 0.5 | 4.8 |
| HEXACHLOROETHANE | ND | 0.5 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 0.5 | 4.8 |
| ISOPHORONE | ND | 0.5 | 4.8 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 0.5 | 4.8 |
| N-NITROSODIPHENYLAMINE (2) | ND | 1.0 | 9.5 |
| NITROBENZENE | ND | 1.0 | 5.7 |
| PENTACHLOROPHENOL | ND | 0.5 | 4.8 |
| PHENANTHRENE | ND | 0.5 | 4.8 |
| PHENOL | ND | 0.5 | 4.8 |
| PYRENE | ND | 0.5 | 0.5 |
| 1,1'-BIPHENYL | ND | 1.0 | 4.8 |
| ACETOPHENONE | ND | 0.5 | 4.8 |
| ATRAZINE | ND | 0.5 | 4.8 |
| BENZALDEHYDE | ND | 0.5 | 4.8 |
| CAPROLACTAM | ND | 0.5 | 4.8 |
| CARBAZOLE | ND | 0.5 | 4.8 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 82 | 25-134 | |
| 2-FLUOROBIPHENYL | 68 | 43-125 | |
| 2-FLUOROPHENOL | 59 | 25-125 | |
| NITROBENZENE-D5 | 69 | 32-125 | |
| PHENOL-D5 | 64 | 25-125 | |
| TERPHENYL-D14 | 89 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH FW, INC.
Project : MFA SITE 1, CTO 86
Batch No. : 05D068
Sample ID : 86-S1-117
Lab Samp ID : D068-03
Lab File ID : RDH124
Ext Btch ID : SVD016W
Calib. Ref. : RCH307

Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/16/05 13:00
Date Analyzed: 04/19/05 19:30
Dilution Factor: .95
Matrix : WATER
% Moisture : NA
Instrument ID : T-041

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 6.3 |
| 2,4-DINITROPHENOL | ND | 10 | 5.7 |
| 2,4-DINITROTOLUENE | ND | 10 | 4.8 |
| 2,6-DINITROTOLUENE | ND | 9.5 | 4.8 |
| 2-CHLORONAPHTHALENE | ND | 9.5 | 4.8 |
| 2-CHLOROPHENOL | ND | 9.5 | 4.8 |
| 2-METHYLNAPHTHALENE | ND | 10 | 5.7 |
| 2-METHYLPHENOL | ND | 9.5 | 4.8 |
| 2-NITROANILINE | ND | 9.5 | 4.8 |
| 2-NITROPHENOL | ND | 9.5 | 4.8 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.5 | 6.3 |
| 3-NITROANILINE | ND | 10 | 6.3 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 9.5 | 4.8 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.5 | 4.8 |
| 4-CHLOROANILINE | ND | 9.5 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 10 | 4.8 |
| 4-NITROANILINE | ND | 9.5 | 4.8 |
| 4-NITROPHENOL | ND | 9.5 | 4.8 |
| ACENAPHTHENE | ND | 9.5 | 4.8 |
| ACENAPHTHYLENE | ND | 9.5 | 4.8 |
| ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)PYRENE | ND | 9.5 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 9.5 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.5 | 4.8 |
| BUTYLBENZYLPHTHALATE | ND | 9.5 | 4.8 |
| CHRYSENE | ND | 9.5 | 4.8 |
| DI-N-BUTYLPHTHALATE | ND | 9.5 | 4.8 |
| DI-N-OCTYLPHTHALATE | ND | 9.5 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 5.7 |
| DIBENZOFURAN | ND | 10 | 4.8 |
| DIETHYLPHTHALATE | ND | 9.5 | 4.8 |
| DIMETHYLPHTHALATE | ND | 9.5 | 4.8 |
| FLUORANTHENE | ND | 10 | 5.7 |
| FLUORENE | ND | 9.5 | 4.8 |
| HEXACHLOROBENZENE | ND | 9.5 | 4.8 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.5 | 4.8 |
| HEXACHLOROETHANE | ND | 9.5 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.5 | 4.8 |
| ISOPHORONE | ND | 9.5 | 4.8 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.5 | 4.8 |
| N-NITROSDIPHENYLAMINE (2) | ND | 10 | 9.5 |
| NITROBENZENE | ND | 10 | 5.7 |
| PENTACHLOROPHENOL | ND | 10 | 4.8 |
| PHENANTHRENE | ND | 9.5 | 4.8 |
| PHENOL | ND | 9.5 | 4.8 |
| PYRENE | ND | 9.5 | 2.4 |
| 1,1'-BIPHENYL | ND | 10 | 9.5 |
| ACETOPHENONE | ND | 9.5 | 4.8 |
| ATRAZINE | ND | 9.5 | 4.8 |
| BENZALDEHYDE | ND | 9.5 | 4.8 |
| CAPROLACTAM | ND | 9.5 | 4.8 |
| CARBAZOLE | ND | 9.5 | 4.8 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 76 | 25-134 |
| 2-FLUOROBIPHENYL | 70 | 43-120 |
| 2-FLUOROPHENOL | 69 | 35-120 |
| NITROBENZENE-D5 | 75 | 35-155 |
| PHENOL-D5 | 68 | 25-120 |
| TERPHENYL-D14 | 84 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05D068
Sample ID   : 86-S1-118
Lab Samp ID : D068-04
Lab File ID : RDH125
Ext Btch ID : SVD016W
Calib. Ref. : RCH307

Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/16/05 13:00
Date Analyzed: 04/19/05 19:58
Dilution Factor: .94
Matrix       : WATER
% Moisture   : NA
Instrument ID : T-041
=====
  
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROPHENOL | ND | 19 | 5.6 |
| 2,4-DINITROTOLUENE | ND | 19 | 4.7 |
| 2,6-DINITROTOLUENE | ND | 9.4 | 4.7 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 19 | 5.6 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,1-DICHLOROBENZIDINE | ND | 9.4 | 9.4 |
| 3-NITROANILINE | ND | 19 | 9.4 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 19 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 19 | 9.4 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 5.6 |
| DIBENZOFURAN | ND | 19 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| DIMETHYLPHTHALATE | ND | 9.4 | 4.7 |
| FLUORANTHENE | ND | 19 | 5.6 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 9.4 |
| NITROBENZENE | ND | 19 | 5.6 |
| PENTACHLOROPHENOL | ND | 19 | 4.7 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 2.3 |
| 1,1'-BIPHENYL | ND | 19 | 9.4 |
| ACETOPHENONE | ND | 9.4 | 4.7 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 77 | 25-134 | |
| 2-FLUOROBIPHENYL | 70 | 43-125 | |
| 2-FLUOROPHENOL | 63 | 25-125 | |
| NITROBENZENE-D5 | 74 | 26-125 | |
| PHENOL-D5 | 69 | 25-125 | |
| TERPHENYL-D14 | 87 | 42-126 | |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05D068
Sample ID   : 86-S1-119
Lab Samp ID : D068-05
Lab File ID : RDH126
Ext Btch ID : SVD016W
Calib. Ref. : RCH307

Date Collected: 04/13/05
Date Received: 04/14/05
Date Extracted: 04/16/05 13:00
Date Analyzed: 04/19/05 20:26
Dilution Factor: .94
Matrix       : WATER
% Moisture   : NA
Instrument ID : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROPHENOL | ND | 19 | 5.6 |
| 2,4-DINITROTOLUENE | ND | 9.4 | 4.7 |
| 2,6-DINITROTOLUENE | ND | 9.4 | 4.7 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 19 | 5.6 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 19 | 6.6 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 4.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 19 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.4 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 19 | 5.6 |
| DIETHYLPHTHALATE | ND | 19 | 4.7 |
| DIMETHYLPHTHALATE | ND | 9.4 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 19 | 5.6 |
| HEXACHLORO BENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 4.7 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 19 | 2.3 |
| ACETOPHENONE | ND | 9.4 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 81 | 25-134 |
| 2-FLUOROBIPHENYL | 67 | 43-122 |
| 2-FLUOROPHENOL | 62 | 25-55 |
| NITROBENZENE-D5 | 71 | 25-25 |
| PHENOL-D5 | 69 | 42-126 |
| TERPHENYL-D14 | 86 | |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/13/05
Project     : MFA SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                 Date Extracted: 04/16/05 13:00
Sample ID   : 86-S1-120              Date Analyzed: 04/19/05 20:54
Lab Smp ID  : D068-06                Dilution Factor: .96
Lab File ID : RDH127                 Matrix          : WATER
Ext Btch ID : SVD016W                % Moisture      : NA
Calib. Ref. : RCH307                 Instrument ID   : T-041
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,6-TRICHLOROPHENOL | ND | 9.6 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.6 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 9.6 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 9.6 | 4.8 |
| 2,4-DINITROPHENOL | ND | 19 | 9.6 |
| 2,4-DINITROTOLUENE | ND | 19 | 5.8 |
| 2,6-DINITROTOLUENE | ND | 9.6 | 4.8 |
| 2-CHLORONAPHTHALENE | ND | 9.6 | 4.8 |
| 2-CHLOROPHENOL | ND | 9.6 | 4.8 |
| 2-METHYLNAPHTHALENE | ND | 9.6 | 4.8 |
| 2-METHYLPHENOL | ND | 19 | 5.8 |
| 2-NITROANILINE | ND | 9.6 | 4.8 |
| 2-NITROPHENOL | ND | 9.6 | 4.8 |
| 3,4-DICHLOROBENZIDINE | ND | 9.6 | 4.8 |
| 3-NITROANILINE | ND | 19 | 9.6 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.7 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.6 | 4.8 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.6 | 4.8 |
| 4-CHLOROANILINE | ND | 9.6 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.6 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 9.6 | 4.8 |
| 4-NITROANILINE | ND | 19 | 4.8 |
| 4-NITROPHENOL | ND | 9.6 | 4.8 |
| ACENAPHTHENE | ND | 9.6 | 4.8 |
| ACENAPHTHYLENE | ND | 9.6 | 4.8 |
| ANTHRACENE | ND | 9.6 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 9.6 | 4.8 |
| BENZO(A)PYRENE | ND | 9.6 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 9.6 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 9.6 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 9.6 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.6 | 4.8 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.6 | 4.8 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.6 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.6 | 4.8 |
| BUTYLBENZYLPHTHALATE | ND | 9.6 | 4.8 |
| CHRYSENE | ND | 9.6 | 4.8 |
| DI-N-BUTYLPHTHALATE | ND | 9.6 | 4.8 |
| DI-N-OCTYLPHTHALATE | ND | 9.6 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.6 | 4.8 |
| DIBENZOFURAN | ND | 9.6 | 4.8 |
| DIETHYLPHTHALATE | ND | 19 | 4.8 |
| DIMETHYLPHTHALATE | ND | 9.6 | 4.8 |
| FLUORANTHENE | ND | 9.6 | 4.8 |
| FLUORENE | ND | 19 | 5.8 |
| HEXACHLOROBENZENE | ND | 9.6 | 4.8 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.6 | 4.8 |
| HEXACHLOROETHANE | ND | 9.6 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.6 | 4.8 |
| ISOPHORONE | ND | 9.6 | 4.8 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.6 | 4.8 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.6 | 4.8 |
| NITROBENZENE | ND | 19 | 9.6 |
| PENTACHLOROPHENOL | ND | 19 | 5.8 |
| PHENANTHRENE | ND | 9.6 | 4.8 |
| PHENOL | ND | 9.6 | 4.8 |
| PYRENE | ND | 9.6 | 4.8 |
| 1,1'-BIPHENYL | ND | 9.6 | 2.4 |
| ACETOPHENONE | ND | 19 | 9.6 |
| ATRAZINE | ND | 9.6 | 4.8 |
| BENZALDEHYDE | ND | 9.6 | 4.8 |
| CAPROLACTAM | ND | 9.6 | 4.8 |
| CARBAZOLE | ND | 9.6 | 4.8 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 82 | 25-134 |
| 2-FLUOROBIPHENYL | 72 | 43-125 |
| 2-FLUOROPHENOL | 67 | 25-125 |
| NITROBENZENE-D5 | 78 | 25-125 |
| PHENOL-D5 | 73 | 25-125 |
| TERPHENYL-D14 | 89 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D068

**SW3520C/8081A
PESTICIDES**

Five (5) water samples were received on 04/14/05 for Pesticides analysis by Method 3520C/8081A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was at five-point for Pesticides, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and mean recoveries were within 85-115%. Endrin and DDT breakdown were within QC limits.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

When sample results are confirmed by a second column, the relative percentage difference (RPD) between the two results is calculated. If RPD is less than 40%, and no evidence of chromatographic problems, the higher result is reported. If RPD is greater than 40%, the chromatogram is checked for anomalies and results are selected based on the best professional judgement. If no evidence of any chromatographic problems, the higher result is reported.

SW3520C/8081A
 PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-116               Date Analyzed: 04/18/05 20:17
Lab Samp ID : D068-02                 Dilution Factor: .94
Lab File ID : SD18021A                Matrix       : WATER
Ext Btch ID : CPD012W                 % Moisture    : NA
Calib. Ref. : SD18003A                Instrument ID : GCT008
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | .038J .054) | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) .04J | .047 | .0094 .0094 |
| BETA-BHC | (ND) 10 | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) .01J | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) .011J | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) .022J | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .094 .094 |
| ENDRIN | (ND) ND | .094 | .019 .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (103) 100 | 30-130 | |
| DECACHLOROBIPHENYL | (84) 82 | 30-130 | |

RL : Reporting limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 050068
Sample ID   : 86-S1-117
Lab Smp ID  : D068-03
Lab File ID : SD18022A
Ext Btch ID : CP0012W
Calib. Ref. : SD18003A

Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/14/05 13:00
Date Analyzed: 04/18/05 20:42
Dilution Factor: .95
Matrix       : WATER
% Moisture   : NA
Instrument ID : GCT008
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .048 | .0095 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0095 |
| BETA-BHC | (ND) ND | .048 | .0095 |
| HEPTACHLOR | (ND) ND | .048 | .0095 |
| DELTA-BHC | (ND) ND | .048 | .0095 |
| ALDRIN | (ND) ND | .048 | .0095 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0095 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0095 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .028 |
| ENDOSULFAN I | (ND) ND | .095 | .028 |
| 4,4'-DDE | (ND) ND | .19 | .095 |
| DIELDRIN | (ND) ND | .095 | .019 |
| ENDRIN | (ND) ND | .095 | .028 |
| 4,4'-DDD | (ND) ND | .095 | .019 |
| ENDOSULFAN II | (ND) ND | .095 | .019 |
| 4,4'-DDT | (ND) ND | .095 | .019 |
| ENDRIN ALDEHYDE | (ND) ND | .095 | .019 |
| ENDOSULFAN SULFATE | (ND) ND | .095 | .019 |
| ENDRIN KETONE | (ND) ND | .48 | .095 |
| METHOXYCHLOR | (ND) ND | 2.8 | 1.2 |
| TOXAPHENE | (ND) ND | | |
| SURROGATE PARAMETERS | | | |
| | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | 82 (91) | 30-130 | |
| DECACHLOROBIPHENYL | (81) 80 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
 PESTICIDES

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05D068
Sample ID   : 86-S1-118
Lab Samp ID : D068-04
Lab File ID : SD18023A
Ext Btch ID : CPD012W
Calib. Ref. : SD18003A
Date Collected: 04/12/05
Date Received: 04/14/05
Date Extracted: 04/14/05 13:00
Date Analyzed: 04/18/05 21:07
Dilution Factor: .94
Matrix      : WATER
% Moisture  : NA
Instrument ID : GCT008
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| | (ND) ND | .047 | .0094 .0094 |
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) .012J | .047 | .0094 .0094 |
| HEPTACHLOR | (ND) ND | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .028 .028 |
| ENDOSULFAN I | (ND) ND | .094 | .028 .028 |
| 4,4'-DDE | (ND) ND | .19 | .094 .094 |
| DIELDRIN | (ND) ND | .094 | .019 .019 |
| ENDRIN | (ND) ND | .094 | .028 .028 |
| 4,4'-DDD | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .47 | .094 .094 |
| METHOXYCHLOR | (ND) ND | 2.8 | 1.2 1.2 |
| TOXAPHENE | (ND) ND | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| | 69 (79) | 30-130 | |
| TETRACHLORO-M-XYLENE | (78) 78 | 30-130 | |
| DECACHLOROBIPHENYL | | | |

RL : Reporting limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/13/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-119                  Date Analyzed: 04/18/05 21:32
Lab Samp ID: D068-05                  Dilution Factor: .95
Lab File ID: SD18024A                 Matrix          : WATER
Ext Btch ID: CPD012W                  % Moisture       : NA
Calib. Ref.: SD18003A                 Instrument ID    : GCT008
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | .01J (ND) | .048 | .0095 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0095 |
| BETA-BHC | (ND) ND | .048 | .0095 |
| HEPTACHLOR | (ND) ND | .048 | .0095 |
| DELTA-BHC | (ND) ND | .048 | .0095 |
| ALDRIN | (ND) .018J | .048 | .0095 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0095 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0095 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .028 |
| ENDOSULFAN I | (ND) ND | .095 | .028 |
| 4,4'-DDE | (ND) ND | .19 | .095 |
| DIELDRIN | (ND) ND | .095 | .019 |
| ENDRIN | (ND) ND | .095 | .028 |
| 4,4'-DDD | (ND) ND | .095 | .019 |
| ENDOSULFAN II | (ND) ND | .095 | .019 |
| 4,4'-DDT | (ND) ND | .095 | .019 |
| ENDRIN ALDEHYDE | (ND) ND | .095 | .019 |
| ENDOSULFAN SULFATE | (ND) ND | .095 | .019 |
| ENDRIN KETONE | (ND) ND | .48 | .095 |
| METHOXYCHLOR | (ND) ND | 2.8 | 1.2 |
| TOXAPHENE | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | 60 (69) | 30-130 | |
| DECACHLOROBIPHENYL | (67) 65 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH FW, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05D068
Sample ID   : 86-S1-120
Lab Samp ID : D068-06
Lab File ID : SD18025A
Ext Btch ID : CPD012W
Calib. Ref. : SD18003A
=====
Date Collected: 04/13/05
Date Received: 04/14/05
Date Extracted: 04/14/05 13:00
Date Analyzed: 04/18/05 21:58
Dilution Factor: .96
Matrix      : WATER
% Moisture  : NA
Instrument ID : GCT008
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .048 | .0096 .0096 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0096 .0096 |
| BETA-BHC | (ND) .35 | .048 | .0096 .0096 |
| HEPTACHLOR | (ND) ND | .048 | .0096 .0096 |
| DELTA-BHC | (ND) ND | .048 | .0096 .0096 |
| ALDRIN | (ND) .018J | .048 | .0096 .0096 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0096 .0096 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0096 .0096 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .029 .029 |
| ENDOSULFAN I | (ND) ND | .096 | .029 .029 |
| 4,4'-DDE | (ND) ND | .19 | .096 .096 |
| DIELDRIN | (ND) ND | .096 | .019 .019 |
| ENDRIN | (ND) ND | .096 | .029 .029 |
| 4,4'-DDD | (ND) ND | .096 | .019 .019 |
| ENDOSULFAN II | (ND) ND | .096 | .019 .019 |
| 4,4'-DDT | (ND) ND | .096 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .096 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .096 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .48 | .096 .096 |
| METHOXYCHLOR | (ND) ND | 2.9 | 1.2 1.2 |
| TOXAPHENE | (ND) ND | | |
| SURROGATE PARAMETERS | | % RECOVERY | QC LIMIT |
| TETRACHLORO-M-XYLENE | | 86 (88) | 30-130 |
| DECACHLOROBIPHENYL | | (89) 88 | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D068

**SW3520C/8082
PCBs**

Five (5) water samples were received on 04/14/05 for PCBs analysis by Method 3520C/8082 in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was five points for PCB-1016 and PCB-1260, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and all recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW3520C/8082
PCBs

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=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-116                  Date Analyzed: 04/18/05 20:17
Lab Samp ID: D068-02                  Dilution Factor: .94
Lab File ID: SD18021A                 Matrix       : WATER
Ext Btch ID: CPD012W                  % Moisture    : NA
Calib. Ref.: SD18006A                 Instrument ID : GCT008
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (76) 96 | 30-130 |
| DECACHLOROBIPHENYL | (93) 91 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/14/05 13:00
Sample ID   : 86-S1-117                Date Analyzed: 04/18/05 20:42
Lab Samp ID : D068-03                  Dilution Factor: .95
Lab File ID : SD18022A                 Matrix          : WATER
Ext Btch ID : CPD012W                  % Moisture       : NA
Calib. Ref. : SD18006A                 Instrument ID    : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL MDL (ug/L) (ug/L) | |
|----------------------|-------------------|-------------------------|---------|
| | | ----- | ----- |
| PCB-1016 | (ND) ND | .95 | .24 .24 |
| PCB-1221 | (ND) ND | .95 | .24 .24 |
| PCB-1232 | (ND) ND | .95 | .24 .24 |
| PCB-1242 | (ND) ND | .95 | .24 .24 |
| PCB-1248 | (ND) ND | .95 | .24 .24 |
| PCB-1254 | (ND) ND | .95 | .24 .24 |
| PCB-1260 | (ND) ND | .95 | .24 .24 |
| SURROGATE PARAMETERS | | % RECOVERY QC LIMIT | |
| ----- | | ----- | |
| TETRACHLORO-M-XYLENE | (76) 88 | 30-130 | |
| DECACHLOROBIPHENYL | (90) 89 | 30-130 | |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/12/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 050068                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-118                  Date Analyzed: 04/18/05 21:07
Lab Samp ID: D068-04                  Dilution Factor: .94
Lab File ID: SD18023A                 Matrix       : WATER
Ext Btch ID: CP0012W                  % Moisture    : NA
Calib. Ref.: SD18006A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (67) 76 | 30-130 | |
| DECACHLOROBIPHENYL | (87) 86 | 30-130 | |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/13/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-119                  Date Analyzed: 04/18/05 21:32
Lab Samp ID: D068-05                  Dilution Factor: .95
Lab File ID: SD18024A                 Matrix       : WATER
Ext Btch ID: CPD012W                  % Moisture    : NA
Calib. Ref.: SD18006A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .95 | .24 .24 |
| PCB-1221 | (ND) ND | .95 | .24 .24 |
| PCB-1232 | (ND) ND | .95 | .24 .24 |
| PCB-1242 | (ND) ND | .95 | .24 .24 |
| PCB-1248 | (ND) ND | .95 | .24 .24 |
| PCB-1254 | (ND) ND | .95 | .24 .24 |
| PCB-1260 | (ND) ND | .95 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (57) 66 | 30-130 |
| DECACHLOROBIPHENYL | (74) 72 | 30-130 |

RL: Reporting Limit
Left of | is related to first column ; Right of | related to second column
() included the reported column
* Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH FW, INC.      Date Collected: 04/13/05
Project     : MFA, SITE 1, CTO 86      Date Received: 04/14/05
Batch No.   : 05D068                  Date Extracted: 04/14/05 13:00
Sample ID: 86-S1-120                  Date Analyzed: 04/18/05 21:58
Lab Samp ID: D068-06                  Dilution Factor: .96
Lab File ID: SD18025A                 Matrix          : WATER
Ext Btch ID: CPD012W                  % Moisture       : NA
Calib. Ref.: SD18006A                 Instrument ID    : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .96 | .24 .24 |
| PCB-1221 | (ND) ND | .96 | .24 .24 |
| PCB-1232 | (ND) ND | .96 | .24 .24 |
| PCB-1242 | (ND) ND | .96 | .24 .24 |
| PCB-1248 | (ND) ND | .96 | .24 .24 |
| PCB-1254 | (ND) ND | .96 | .24 .24 |
| PCB-1260 | (ND) ND | .96 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (83) 84 | 30-130 |
| DECACHLOROBIPHENYL | (99) 97 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

CASE NARRATIVE

CLIENT: TETRA TECH FW, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05D068

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Five (5) water samples were received on 04/14/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample D061-02 from another SDG was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Samples were analyzed at DF20 due to matrix interference.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Matrix : WATER
Instrument ID : 11047

Client : TETRA TECH FW, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05D068

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (UG/L) | DLF | MOIST | RL (UG/L) | MOL (UG/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|-----------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGD016MB | ND | 1 | NA | 2 | 1 | 04/20/0517:08 | 04/19/0515:30 | M470015010 | M470015008 | HGD016W | NA | 04/19/05 |
| LCS1W | HGD016ML | 4.95 | 1 | NA | 2 | 1 | 04/20/0517:10 | 04/19/0515:30 | M470015011 | M470015008 | HGD016W | NA | 04/19/05 |
| LCD1W | HGD016MC | 4.91 | 1 | NA | 2 | 1 | 04/20/0517:12 | 04/19/0515:30 | M470015012 | M470015008 | HGD016W | 04/12/05 | 04/14/05 |
| 86-S1-116 | D068-02 | ND | 20 | NA | 4 | 2 | 04/20/0517:46 | 04/19/0515:30 | M470015026 | M470015020 | HGD016W | 04/12/05 | 04/14/05 |
| 86-S1-117 | D068-03 | ND | 20 | NA | 4 | 2 | 04/20/0517:51 | 04/19/0515:30 | M470015027 | M470015020 | HGD016W | 04/12/05 | 04/14/05 |
| 86-S1-118 | D068-04 | ND | 20 | NA | 4 | 2 | 04/20/0517:53 | 04/19/0515:30 | M470015028 | M470015020 | HGD016W | 04/13/05 | 04/14/05 |
| 86-S1-119 | D068-05 | ND | 20 | NA | 4 | 2 | 04/20/0517:55 | 04/19/0515:30 | M470015029 | M470015020 | HGD016W | 04/13/05 | 04/14/05 |
| 86-S1-120 | D068-06 | ND | 20 | NA | 4 | 2 | 04/20/0517:55 | 04/19/0515:30 | M470015030 | M470015020 | HGD016W | 04/13/05 | 04/14/05 |

RL: Reporting Limit

7003

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 12 through April 13, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Volatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D068

Sample Identification

86-S1-123
86-S1-116
86-S1-117
86-S1-118**
86-S1-119
86-S1-120

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for all individual compounds.

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

For the purposes of technical evaluation, all compounds were evaluated against the 20.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 86-S1-117 and 86-S1-118** were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

| Compound | Concentration (ug/L) | | RPD |
|----------|----------------------|-------------|----------------|
| | 86-S1-117 | 86-S1-118** | |
| Acetone | 10U | 4.4 | Not calculable |

XVII. Field Blanks

Sample 86-S1-123 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Airfield, MFA Site 1, CTO 86
Volatiles - Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 12 through April 13, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Semivolatiles
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D068

Sample Identification

86-S1-116
86-S1-117
86-S1-118**
86-S1-119
86-S1-120

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

The mean percent relative standard deviation (%RSD) for all compounds was less than or equal to 15.0% and less than or equal to 30.0% for selected individual compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

Average relative response factors (RRF) for all system performance check compounds (SPCCs) were within method criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all compounds.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 86-S1-117 and 86-S1-118** were identified as field duplicates. No semivolatiles were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 12 through April 13, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Chlorinated Pesticides
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D068

Sample Identification

86-S1-116
86-S1-117
86-S1-118**
86-S1-119
86-S1-120

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

Samples 86-S1-117 and 86-S1-118** were identified as field duplicates. No chlorinated pesticides were detected in any of the samples.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86
Chlorinated Pesticides - Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, MFA Site 1, CTO 86
Collection Date: April 12 through April 13, 2005
LDC Report Date: May 25, 2005
Matrix: Water
Parameters: Polychlorinated Biphenyls
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05D068

Sample Identification

86-S1-116
86-S1-117
86-S1-118**
86-S1-119
86-S1-120

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance data were not provided and therefore not reviewed.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

XIV. Field Duplicates

Samples 86-S1-117 and 86-S1-118** were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, MFA Site 1, CTO 86

Polychlorinated Biphenyls - Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

Moffett Airfield, MFA Site 1, CTO 86

Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 05D068

No Sample Data Qualified in this SDG

LDC Report# 13504C4

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Air Field, Site 1, CTO 86
Collection Date: April 12 through April 13, 2005
LDC Report Date: May 23, 2005
Matrix: Water
Parameters: Metals
Validation Level: EPA Level III & IV
Laboratory: EMAX Laboratories, Inc./Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): 05D068/K2502714

Sample Identification

86-S1-116
86-S1-117
86-S1-118**
86-S1-119
86-S1-120
86-S1-120MS
86-S1-120DUP

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B and 7000 and EPA Method 200.8 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|-----------------|---|--|------------------------------------|
| PB (prep blank) | Beryllium Copper Nickel Selenium Thallium Zinc | 0.00009 ug/L 0.0010 ug/L 0.031 ug/L 0.74 ug/L 0.00027 ug/L 0.006 ug/L | All samples in SDG 05D068/K2502714 |
| ICB/CCB | Antimony Arsenic Beryllium Cadmium Chromium Cobalt Nickel Selenium Silver Thallium Zinc | 0.014 ug/L 0.097 ug/L 0.00890 ug/L 0.01 ug/L 0.071 ug/L 0.0040 ug/L 0.022 ug/L 0.28 ug/L 0.01 ug/L 0.02500 ug/L 0.030 ug/L | All samples in SDG 05D068/K2502714 |

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|-------------|---|---|---|
| 86-S1-116 | Antimony Beryllium Selenium | 0.214 ug/L 0.00118 ug/L 0.44 ug/L | 0.214U ug/L 0.00118U ug/L 0.44U ug/L |
| 86-S1-117 | Antimony Beryllium Selenium | 0.204 ug/L 0.00052 ug/L 0.48 ug/L | 0.204U ug/L 0.00052U ug/L 0.48U ug/L |
| 86-S1-118** | Antimony Selenium | 0.202 ug/L 0.46 ug/L | 0.202U ug/L 0.46U ug/L |
| 86-S1-119 | Antimony Cadmium Selenium Silver | 0.252 ug/L 0.0056 ug/L 0.44 ug/L 0.0031 ug/L | 0.252U ug/L 0.0056U ug/L 0.44U ug/L 0.0031U ug/L |
| 86-S1-120 | Antimony Selenium Silver | 0.312 ug/L 0.54 ug/L 0.0029 ug/L | 0.312U ug/L 0.54U ug/L 0.0029U ug/L |

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | %R (Limits) | Flag | A or P |
|--|--------------------------------|---|---|--------|
| 86-S1-110MS (All samples in SDG 05D068/K2502714) | Arsenic Beryllium Copper | 56 (75-125) 69 (75-125) 73 (75-125) | J (all detects) UJ (all non-detects) | A |

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

All internal standard percent recoveries (%R) were within QC limits for samples on which a EPA Level IV review was performed with the following exceptions:

| Sample | Internal Standard | %R (Limits) | Analyte | Flag | A or P |
|-------------|---|--|--|---|--------|
| 86-S1-118** | Nickel-61 Indium-115 (4/29/05) Indium-115 (4/25/05) | 139 (60-125) 134.7 (60-125) 167.4 (60-125) | Nickel Arsenic Cadmium Chromium Cobalt Copper Silver Zinc Antimony Barium | J (all detects) UJ (all non-detects) | P |

Raw data were not evaluated for the samples reviewed by Level III criteria.

IX. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for samples reviewed by Level III criteria.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

All sample result verification met validation criteria with the following exceptions:

| Sample | Analyte | Finding | Criteria | Flag | A or P |
|------------------------------------|----------|--|---|------|--------|
| All samples in SDG 05D068/K2502714 | Antimony | Laboratory method detection limit reported at 0.12 ug/L. | MDL should be reported at 0.05 ug/L per the QAPP. | None | P |
| All samples in SDG 05D068/K2502714 | Barium | Laboratory method detection limit reported at 0.60 ug/L. | MDL should be reported at 0.05 ug/L per the QAPP. | None | P |

Raw data were not evaluated for samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

Samples 86-S1-117 and 86-S1-118** were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

| Compound | Concentration (ug/L) | | RPD |
|-----------|----------------------|-------------|----------------|
| | 86-S1-117 | 86-S1-118** | |
| Antimony | 0.204 | 0.202 | 1 |
| Arsenic | 2.090 | 1.770 | 17 |
| Barium | 130 | 130 | 0 |
| Beryllium | 0.00052 | 0.00009U | Not calculable |
| Cadmium | 0.0383 | 0.0413 | 8 |
| Chromium | 0.263 | 0.257 | 2 |
| Cobalt | 2.7400 | 2.4000 | 13 |
| Copper | 0.3290 | 0.4340 | 28 |
| Lead | 0.007 | 0.020 | 96 |
| Nickel | 5.410 | 5.270 | 3 |
| Selenium | 0.48 | 0.46 | 4 |
| Silver | 0.0150 | 0.0151 | 1 |
| Zinc | 6.460 | 7.150 | 10 |

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86

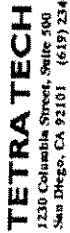
Metals - Data Qualification Summary - SDG 05D068/K2502714

| SDG | Sample | Analyte | Flag | A or P | Reason |
|---------------------|---|--|---|--------|----------------------------|
| 05D068/ K2502714 | 86-S1-116 86-S1-117 86-S1-118** 86-S1-119 86-S1-120 | Arsenic Beryllium Copper | J (all detects) UJ (all non-detects) | A | Matrix spike analysis (%R) |
| 05D068/ K2502714 | 86-S1-118** | Nickel Arsenic Cadmium Chromium Cobalt Copper Silver Zinc Antimony Barium | J (all detects) UJ (all non-detects) | P | Internal standards (%R) |
| 05D068/ K2502714 | 86-S1-116 86-S1-117 86-S1-118** 86-S1-119 86-S1-120 | Antimony Barium | None None | P | Sample result verification |

Moffett Air Field, Site 1, CTO 86

Metals - Laboratory Blank Data Qualification Summary - SDG 05D068/K2502714

| SDG | Sample | Analyte | Modified Final Concentration | A or P |
|---------------------|-------------|---|---|--------|
| 05D068/ K2502714 | 86-S1-116 | Antimony Beryllium Selenium | 0.214U ug/L 0.00118U ug/L 0.44U ug/L | A |
| 05D068/ K2502714 | 86-S1-117 | Antimony Beryllium Selenium | 0.204U ug/L 0.00052U ug/L 0.48U ug/L | A |
| 05D068/ K2502714 | 86-S1-118** | Antimony Selenium | 0.202U ug/L 0.46U ug/L | A |
| 05D068/ K2502714 | 86-S1-119 | Antimony Cadmium Selenium Silver | 0.252U ug/L 0.0056U ug/L 0.44U ug/L 0.0031U ug/L | A |
| 05D068/ K2502714 | 86-S1-120 | Antimony Selenium Silver | 0.312U ug/L 0.54U ug/L 0.0029U ug/L | A |



1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10837

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 11-03-2005
EMAX Batch No.: 05J036

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on 10/06/05.
The data reported include:

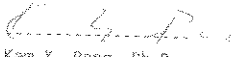
| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|---|
| 86-S1-137 | J036-01 | 10/04/05 | WATER | VOLATILE ORGANICS BY GC/MS |
| 86-S1-124 | J036-02 | 10/04/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-125 | J036-03 | 10/04/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE SEMIVOLATILE ORGANICS BY GC/MS |

Note: Dissolved Metals in water & waste was subcontracted to Columbia and will be submitted at a later date.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,


Kam Y. Pang, Ph.D.
Laboratory Director

A

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CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J036

**SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS**

Three (3) water samples were received on 10/06/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**
Analytical holding time was met.
2. **Tuning and Calibration**
Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.
3. **Method Blank**
Method blank was free of contamination at the reporting limit.
4. **Surrogate Recovery**
Recoveries were within QC limit.
5. **Lab Control Sample/Lab Control Sample Duplicate**
Recoveries were within QC limit.
6. **Matrix Spike/Matrix Spike Duplicate**
No MS/MSD sample was designated in this SDG.
7. **Sample Analysis**
Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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| | |
|-------------------------------|--------------------------------|
| Client : TETRA TECH EC, INC. | Date Collected: 10/04/05 |
| Project : MFA, SITE 1, CTO B6 | Date Received: 10/06/05 |
| Batch No. : 05J036 | Date Extracted: 10/12/05 23:41 |
| Sample ID: 86-S1-137 | Date Analyzed: 10/12/05 23:41 |
| Lab Samp ID: J036-01R | Dilution Factor: 1 |
| Lab File ID: RJD377 | Matrix : WATER |
| Ext Btch ID: V094J33 | % Moisture : NA |
| Calib. Ref.: RJD292 | Instrument ID : T-094 |

=====

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | .5 | .2 |
| 2-CHLOROTOLUENE | ND | 10 | .2 |
| 2-HEXANONE | ND | .5 | .2 |
| 4-CHLOROTOLUENE | ND | 10 | .2 |
| 4-METHYL-2-PENTANONE | ND | .5 | .2 |
| ACETONE | ND | 10 | .2 |
| BENZENE | ND | 10 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | .5 | .2 |
| ===== | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 100 | 62-139 | |
| TOLUENE-DB | 97 | 75-125 | |
| BROMOFLUOROBENZENE | 97 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.
Project     : MFA, SITE 1, CTO 86
Batch No.   : 05J036
Sample ID   : 86-G1-124
Lab Smp ID  : J036-02R
Lab File ID : RJD378
Ext Btch ID : V094J33
Calib. Ref. : RJD292
Date Collected: 10/04/05
Date Received: 10/06/05
Date Extracted: 10/13/05 00:20
Date Analyzed: 10/13/05 00:20
Dilution Factor: 1
Matrix      : WATER
% Moisture  : NA
Instrument ID : T-094
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHENE | ND | 5 | 2 |
| 1,1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,2-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 5 | 2 |
| 2-CHLOROTOLUENE | ND | 10 | 5 |
| 2-HEXANONE | ND | 5 | 2 |
| 4-CHLOROTOLUENE | ND | 10 | 5 |
| 4-METHYL-2-PENTANONE | ND | 5 | 2 |
| ACETONE | ND | 10 | 5 |
| BENZENE | ND | 10 | 5 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 5 | 2 |
| BROMOMETHANE | ND | 5 | 2 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 5 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 5 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 2 |
| ETHYLBENZENE | ND | 5 | 2 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 5 | 2 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 2 |
| VINYL CHLORIDE | ND | 5 | 2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 117 | 62-139 | |
| TOLUENE-D8 | 93 | 75-125 | |
| BROMOFLUOROBENZENE | 96 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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| | |
|-------------------------------|--------------------------------|
| Client : TETRA TECH EC, INC. | Date Collected: 10/04/05 |
| Project : MFA, SITE 1, CTO 86 | Date Received: 10/06/05 |
| Batch No. : 053036 | Date Extracted: 10/13/05 01:00 |
| Sample ID: 86-S1-125 | Date Analyzed: 10/13/05 01:00 |
| Lab Smp ID: J036-03R | Dilution Factor: 1 |
| Lab File ID: RJD379 | Matrix : WATER |
| Ext Btch ID: V094J33 | % Moisture : NA |
| Calib. Ref.: RJD292 | Instrument ID : T-094 |

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 2 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHANE | ND | 5 | 2 |
| 1,1-DICHLOROETHENE | ND | 5 | 2 |
| 1,1-DICHLOROPROPENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 2 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 2 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 2 |
| 1,2-DICHLOROBENZENE | ND | 5 | 2 |
| 1,2-DICHLOROETHANE | ND | 5 | 2 |
| 1,2-DICHLOROPROPANE | ND | 5 | 2 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROBENZENE | ND | 5 | 2 |
| 1,3-DICHLOROPROPANE | ND | 5 | 2 |
| 1,4-DICHLOROBENZENE | ND | 5 | 2 |
| 2,2-DICHLOROPROPANE | ND | 5 | 2 |
| 2-BUTANONE | ND | 5 | 2 |
| 2-CHLOROTOLUENE | ND | 5 | 2 |
| 2-HEXANONE | ND | 5 | 2 |
| 4-CHLOROTOLUENE | ND | 5 | 2 |
| 4-METHYL-2-PENTANONE | ND | 5 | 2 |
| ACETONE | ND | 5 | 2 |
| BENZENE | ND | 5 | 2 |
| BROMOBENZENE | ND | 5 | 2 |
| BROMOCHLOROMETHANE | ND | 5 | 2 |
| BROMODICHLOROMETHANE | ND | 5 | 2 |
| BROMOFORM | ND | 5 | 2 |
| BROMOMETHANE | ND | 5 | 2 |
| CARBON DISULFIDE | ND | 5 | 2 |
| CARBON TETRACHLORIDE | ND | 5 | 2 |
| CHLOROBENZENE | ND | 5 | 2 |
| CHLOROETHANE | ND | 5 | 2 |
| CHLOROFORM | ND | 5 | 2 |
| CHLOROMETHANE | ND | 5 | 2 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| DIBROMOCHLOROMETHANE | ND | 5 | 2 |
| DIBROMOMETHANE | ND | 5 | 2 |
| DICHLOROFLUOROMETHANE | ND | 5 | 2 |
| ETHYLBENZENE | ND | 5 | 2 |
| HEXACHLOROBUTADIENE | ND | 5 | 2 |
| ISOPROPYL BENZENE | ND | 5 | 2 |
| M/P-XYLENES | ND | 5 | 2 |
| METHYLENE CHLORIDE | ND | 5 | 2 |
| N-BUTYLBENZENE | ND | 5 | 2 |
| N-PROPYLBENZENE | ND | 5 | 2 |
| NAPHTHALENE | ND | 5 | 2 |
| O-XYLENE | ND | 5 | 2 |
| P-ISOPROPYLTOLUENE | ND | 5 | 2 |
| SEC-BUTYLBENZENE | ND | 5 | 2 |
| STYRENE | ND | 5 | 2 |
| TERT-BUTYLBENZENE | ND | 5 | 2 |
| TETRACHLOROETHYLENE | ND | 5 | 2 |
| TOLUENE | ND | 5 | 2 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 2 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 2 |
| TRICHLOROETHENE | ND | 5 | 2 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 2 |
| VINYL CHLORIDE | ND | 5 | 2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 113 | 62-139 | |
| TOLUENE-D8 | 94 | 75-125 | |
| BROMOFLUOROBENZENE | 94 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J036

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Two (2) water samples were received on 10/06/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC. Date Collected: 10/04/05
Project : MFA, SITE 1, CTO B6 Date Received: 10/06/05
Batch No. : 05J036 Date Extracted: 10/11/05 20:00
Sample ID: 86-S1-124 Date Analyzed: 10/14/05 15:50
Lab Samp ID: J036-02 Dilution Factor: .94
Lab File ID: RJX079 Matrix : WATER
Ext Btch ID: SVJ009W % Moisture : NA
Calib. Ref.: R1X122 Instrument ID : T-042

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 3,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 3-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 3-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 69 | 25-134 |
| 2-FLUOROBIPHENYL | 56 | 43-125 |
| 2-FLUOROPHENOL | 44 | 62-125 |
| NITROBENZENE-D5 | 49 | 32-125 |
| PHENOL-D5 | 48 | 25-125 |
| TERPHENYL-D14 | 88 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/04/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/06/05
Batch No.    : 05J036                  Date Extracted: 10/11/05 20:00
Sample ID    : 86-S1-125                Date Analyzed: 10/14/05 16:16
Lab Samp ID  : J056-03                  Dilution Factor: 94
Lab File ID  : RJX080                    Matrix: WATER
Ext Btch ID  : SVJ009W                   % Moisture: NA
Calib. Ref.  : RIX122                     Instrument ID : T-042
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 9.4 |
| PHENANTHRENE | ND | 19 | 5.6 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 4.7 |
| ACETOPHENONE | ND | 9.4 | 2.3 |
| ATRAZINE | ND | 19 | 9.4 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | GC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 70 | 25-134 |
| 2-FLUOROBIPHENYL | 61 | 43-125 |
| 2-FLUOROPHENOL | 50 | 25-125 |
| NITROBENZENE-D5 | 56 | 32-125 |
| PHENOL-D5 | 55 | 25-125 |
| TERPHENYL-D14 | 89 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J036

**SW3520C/8081A
PESTICIDES**

Two (2) water samples were received on 10/06/05 for Pesticides analysis by Method 3520C/8081A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was at five-point for Pesticides, all RSDs were within 20%. All continue calibrations were analyzed at 12-hour interval and mean recoveries were within 85-115%. Endrin and DDT breakdown were within QC limits.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All QC criteria were met.

When sample results are confirmed by a second column, the relative percentage difference (RPD) between the two results is calculated. If RPD is less than 40%, and no evidence of chromatographic problems, the higher result is reported. If RPD is greater than 40%, the chromatogram is checked for anomalies and results are selected based on the best professional judgement. If no evidence of any chromatographic problems, the higher result is reported.

SW3520C/8081A
PESTICIDES

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Client      : TETRA TECH EC, INC.      Date Collected: 10/04/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/06/05
Batch No.   : 05J036                  Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-124                  Date Analyzed: 10/13/05 15:26
Lab Samp ID: J036-02                  Dilution Factor: .95
Lab File ID: SJ13012A                 Matrix          : WATER
Ext Btch ID: CPJ007W                  % Moisture       : NA
Calib. Ref.: SJ13003A                 Instrument ID    : GCT008
=====
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .048 | .0095 .0095 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0095 .0095 |
| BETA-BHC | (ND) .021 | .048 | .0095 .0095 |
| HEPTACHLOR | .11 (ND) | .048 | .0095 .0095 |
| DELTA-BHC | (ND) ND | .048 | .0095 .0095 |
| ALDRIN | (ND) ND | .048 | .0095 .0095 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0095 .0095 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0095 .0095 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .0095 .0095 |
| ENDOSULFAN I | (ND) ND | .048 | .028 .028 |
| 4,4'-DDE | (ND) ND | .095 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .095 .095 |
| ENDRIN | (ND) ND | .095 | .019 .019 |
| 4,4'-DDD | (ND) ND | .095 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .095 | .019 .019 |
| 4,4'-DDT | (ND) ND | .095 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .095 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .095 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .095 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .48 | .095 .095 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | 70 (72) | 30-130 |
| DECAHALOROBIPHENYL | 94 (95) | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/04/05
Project      : MFA, SITE 1, CTO 86      Date Received: 10/06/05
Batch No.    : 05J036                   Date Extracted: 10/11/05 14:00
Sample ID    : 86-S1-125                 Date Analyzed: 10/13/05 15:51
Lab Samp ID  : J036-03                   Dilution Factor: .96
Lab File ID  : SJ13013A                  Matrix          : WATER
Ext Btch ID  : CPJ007W                   % Moisture      : NA
Calib. Ref.  : SJ13003A                  Instrument ID   : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .048 | .0096 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0096 |
| BETA-BHC | (ND) ND | .048 | .0096 |
| HEPTACHLOR | 3.6 (ND) | .048 | .0096 |
| DELTA-BHC | (ND) ND | .048 | .0096 |
| ALDRIN | (ND) ND | .048 | .0096 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0096 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0096 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .0096 |
| ENDOSULFAN I | (ND) ND | .048 | .029 |
| 4,4'-DDE | (ND) ND | .096 | .029 |
| DIELDRIN | (ND) ND | .19 | .096 |
| ENDRIN | (ND) ND | .096 | .019 |
| 4,4'-DDD | (ND) ND | .096 | .029 |
| ENDOSULFAN II | (ND) ND | .096 | .019 |
| 4,4'-DDT | (ND) ND | .096 | .019 |
| ENDRIN ALDEHYDE | (ND) ND | .096 | .019 |
| ENDOSULFAN SULFATE | (ND) ND | .096 | .019 |
| ENDRIN KETONE | (ND) ND | .096 | .019 |
| METHOXYCHLOR | (ND) ND | .48 | .096 |
| TOXAPHENE | (ND) ND | 2.9 | 1.2 |
| | | | |
| SURROGATE PARAMETERS | % RECOVERY | GC LIMIT | |
| TETRACHLORO-M-XYLENE | (73) 67 | 30-130 | |
| DECACHLOROBIPHENYL | (97) 96 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05J036

**METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR**

Two (2) water samples were received on 10/06/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample J053-10 from another SDG was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

MS/MSD sample was not designated in this SDG.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Samples were initially analyzed at DF 20 due to matrix interference of high salt level.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH EC, INC.
Project : MFA, SITE 1, CTQ 86
Batch No. : 05J036

Matrix : WATER
Instrument ID : T1047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MDIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|-----------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGJ013WB | ND | 1 | NA | .2 | .1 | 10/13/05 14:11 | 10/13/05 11:00 | M47J012010 | M47J012008 | HGJ013W | NA | 10/13/05 |
| LCS1W | HGJ013WL | 4.99 | 1 | NA | .2 | .1 | 10/13/05 14:13 | 10/13/05 11:00 | M47J012011 | M47J012008 | HGJ013W | NA | 10/13/05 |
| LCD1W | HGJ013WC | 5 | 1 | NA | .2 | .1 | 10/13/05 14:15 | 10/13/05 11:00 | M47J012012 | M47J012008 | HGJ013W | NA | 10/13/05 |
| 86-S1-124 | J036-02 | ND | 20 | NA | 4 | 2 | 10/13/05 15:48 | 10/13/05 11:00 | M47J012055 | M47J012044 | HGJ013W | 10/04/05 | 10/06/05 |
| 86-S1-125 | J036-03 | ND | 20 | NA | 4 | 2 | 10/13/05 15:55 | 10/13/05 11:00 | M47J012058 | M47J012056 | HGJ013W | 10/04/05 | 10/06/05 |

RL: Reporting Limit

7003

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, Site 1, CTO 86

Collection Date: October 4, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J036

Sample Identification

86-S1-137

86-S1-124

86-S1-125

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample 86-S1-137 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Air Field, Site 1, CTO 86
Volatiles - Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

Moffett Air Field, Site 1, CTO 86
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, Site 1, CTO 86

Collection Date: October 4, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Semivolatiles

Validation Level: EPA Level III

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J036

Sample Identification

86-S1-124

86-S1-125

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|----------|---|------------------------------|------------------------------|---|--------|
| 10/14/05 | Bis(2-chloroisopropyl)ether 2,4-Dinitrophenol 4-Nitrophenol Benzo(k)fluoranthene | 34.9 33.8 25.5 33.6 | All samples in SDG 05J036 | J (all detects) UU (all non-detects) | A |

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05J036

| SDG | Sample | Compound | Flag | A or P | Reason |
|--------|------------------------|---|---|--------|--------------------------------|
| 04J036 | 86-S1-124 86-S1-125 | Bis(2-chloroisopropyl)ether 2,4-Dinitrophenol 4-Nitrophenol Benzo(k)fluoranthene | J (all detects) UJ (all non-detects) | A | Continuing calibration (%D) |

Moffett Air Field, Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86

Collection Date: October 4, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Chlorinated Pesticides

Validation Level: EPA Level III

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J036

Sample Identification

86-S1-124

86-S1-125

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits with the following exceptions:

| Date | Standard | Column | Compound | %D | Associated Samples | Flag | A or P |
|----------|-------------|--------------|----------|----|---------------------------|---|--------|
| 10/13/05 | SJ13003B/4B | RTX-CLPESTII | beta-BHC | 19 | All samples in SDG 04J036 | J (all detects) UJ (all non-detects) | A |

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

The individual 4,4'-DDT and Endrin breakdowns were less than 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and Reported CRQLs

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86

Chlorinated Pesticides - Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86

Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Airfield, Site 1, CTO 86

Collection Date: October 4, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Polychlorinated Biphenyls

Validation Level: EPA Level III

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J036

Sample Identification

86-S1-124

86-S1-125

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance data were not provided and therefore not reviewed.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and Reported CRQLs

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Polychlorinated Biphenyls - Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Air Field, Site 1, CTO 86

Collection Date: October 4, 2005

LDC Report Date: November 14, 2005

Matrix: Water

Parameters: Dissolved Mercury

Validation Level: EPA Level III

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J036

Sample Identification

86-S1-124

86-S1-125

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP was not utilized in this SDG.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|--|-------------------|---------------------|----------------------|-----------------|---|--------|
| 86-S1-128MS/MSD (All samples in SDG 05J036) | Dissolved mercury | - | 67 (75-125) | - | J (all detects) UJ (all non-detects) | A |

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XI. Sample Result Verification

Raw data were not reviewed for this SDG.

XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86

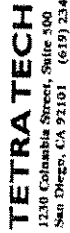
Dissolved Mercury - Data Qualification Summary - SDG 05J036

| SDG | Sample | Analyte | Flag | A or P | Reason |
|--------|------------------------|-------------------|---|--------|--|
| 05J036 | 86-S1-124 86-S1-125 | Dissolved mercury | J (all detects) UJ (all non-detects) | A | Matrix spike/Matrix spike duplicates (%R) |

Moffett Air Field, Site 1, CTO 86

Dissolved Mercury - Laboratory Blank Data Qualification Summary - SDG 05J036

No Sample Data Qualified in this SDG

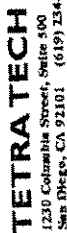


1230 Columbia Street, Suite 300
San Diego, CA 92101 (619) 234-8696

NUMBER 10839

| PROJECT NAME | | PURCHASE ORDER NO. | | ANALYSES REQUIRED | | LABORATORY NAME | | Project Information Section Do not submit to Laboratory | |
|--------------|----------------|--------------------|-----------------|-------------------|---------|----------------------------------|----------|--|-----------------|
| SAMPLE ID | DATE COLLECTED | TIME COLLECTED | NO OF CONTAINER | LEVEL | T Y P E | | COMMENTS | LOCATION | DEPTH START END |
| 60 S1-139 | 11/1/05 | 12:57 | 5 | X | W | X | | Trip Blank | TD |
| 60 S1-151 | 12/1/05 | 12:40 | 7 | X | W | X | | W1-5 | Day |
| 60 S1-152 | 12/1/05 | 12:40 | 7 | X | W | X | | W1-5 | FD |
| 60 S1-153 | 12/1/05 | 13:57 | 7 | X | W | X | | W1-8 | Day |
| 60 S1-154 | 12/1/05 | 14:05 | 7 | X | W | X | | W1-8 | FD |
| 60 S1-155 | 12/1/05 | 14:00 | 7 | X | W | X | | W1-24 | Day |
| 60 S1-156 | 12/1/05 | 14:00 | 7 | X | W | X | | W1-16 | Day |
| | | | | | | LABORATORY INSTRUCTIONS/COMMENTS | | | |
| | | | | | | Ex 1. W1 = Composite 2-7 | | | |
| | | | | | | COMPOSITE DESCRIPTION | | | |
| | | | | | | RECEIVED BY (Signature) | | | |
| | | | | | | COMPANY | | | |
| | | | | | | RECEIVED BY (Signature) | | | |
| | | | | | | COMPANY | | | |
| | | | | | | RECEIVED BY (Signature) | | | |
| | | | | | | COMPANY | | | |
| | | | | | | RECEIVED BY (Signature) | | | |
| | | | | | | COMPANY | | | |

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management



TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 734-8676

NUMBER
10000

CHAIN-OF-CUSTODY RECORD

[illegible]

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 11-03-2005
EMAX Batch No.: 05J053

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, Site 1, CTO 86

Enclosed is the Laboratory report for samples received on 10/07/05.
The data reported include :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|---|
| 86-S1-139 | J053-01 | 10/06/05 | WATER | VOLATILE ORGANICS BY GC/MS |
| 86-S1-131 | J053-02 | 10/06/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-132 | J053-03 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-133 | J053-04 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GCMS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE SEMIVOLATILE ORGANICS BY GCMS |

1000

B

| Sample ID | Control # | Col Date | Matrix | Analysis |
|-----------|-----------|----------|--------|---|
| 86-S1-134 | J053-05 | 10/06/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-135 | J053-06 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-136 | J053-07 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-138 | J053-08 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS |
| 86-S1-126 | J053-09 | 10/06/05 | WATER | VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-128 | J053-10 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-129 | J053-11 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE |
| 86-S1-130 | J053-12 | 10/06/05 | WATER | SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED |

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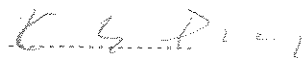
| Sample ID | Control # | Col Date | Matrix | Analysis |
|--------------|-----------|----------|--------|--|
| 86-S1-128MS | J053-10M | 10/06/05 | WATER | DISSOLVED METALS IN WATER & WASTE SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED |
| 86-S1-128MSD | J053-10S | 10/06/05 | WATER | DISSOLVED METALS IN WATER & WASTE SEMIVOLATILE ORGANICS BY GC/MS VOLATILE ORGANICS BY GC/MS PESTICIDES ORGANOCHLORINE POLYCHLORINATED BIPHENYLS (PCBS) MERCURY DISSOLVED DISSOLVED METALS IN WATER & WASTE SEMIVOLATILE ORGANICS BY GC/MS |

Note: Dissolved Metals in water & waste was subcontracted to Columbia and will be submitted at a later date.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,



Kam Y. Pang, Ph.D.
Laboratory Director

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CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J053

**SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS**

Twelve (12) water samples were received on 10/07/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blanks were free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample J053-10 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/19/05 20:37
Sample ID   : 86-S1-139               Date Analyzed: 10/19/05 20:37
Lab Samp ID : J053-01N                Dilution Factor: 1
Lab File ID : RJB278                  Matrix      : WATER
Ext Btch ID : V003J23                 % Moisture   : NA
Calib. Ref. : RJB044                  Instrument ID : T-003
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHENE | ND | 5 | 5 |
| 1,1-DICHLOROPROPENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 5 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 5 |
| 1,2-DICHLOROBENZENE | ND | 5 | 5 |
| 1,2-DICHLOROETHANE | ND | 5 | 5 |
| 1,2-DICHLOROPROPANE | ND | 5 | 5 |
| 1,2,5-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROPROPANE | ND | 5 | 5 |
| 1,4-DICHLOROBENZENE | ND | 5 | 5 |
| 2,2-DICHLOROPROPANE | ND | 5 | 5 |
| 2-BUTANONE | ND | 10 | 5 |
| 2-CHLOROTOLUENE | ND | 10 | 5 |
| 2-HEXANONE | ND | 10 | 5 |
| 4-CHLOROTOLUENE | ND | 10 | 5 |
| 4-METHYL-2-PENTANONE | ND | 10 | 5 |
| ACETONE | ND | 10 | 5 |
| BENZENE | ND | 5 | 5 |
| BROMOBENZENE | ND | 5 | 5 |
| BROMOCHLOROMETHANE | ND | 5 | 5 |
| BROMODICHLOROMETHANE | ND | 5 | 5 |
| BROMOFORM | ND | 5 | 5 |
| BROMOMETHANE | ND | 5 | 5 |
| CARBON DISULFIDE | ND | 5 | 5 |
| CARBON TETRACHLORIDE | ND | 5 | 5 |
| CHLOROBENZENE | ND | 5 | 5 |
| CHLOROETHANE | ND | 5 | 5 |
| CHLOROFORM | ND | 5 | 5 |
| CHLOROMETHANE | ND | 5 | 5 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| DIBROMOCHLOROMETHANE | ND | 5 | 5 |
| DIBROMOMETHANE | ND | 5 | 5 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 5 |
| ETHYLBENZENE | ND | 5 | 5 |
| HEXACHLOROBUTADIENE | ND | 5 | 5 |
| ISOPROPYL BENZENE | ND | 5 | 5 |
| M/P-XYLENES | ND | 5 | 5 |
| METHYLENE CHLORIDE | ND | 5 | 5 |
| N-BUTYLBENZENE | ND | 5 | 5 |
| N-PROPYLBENZENE | ND | 5 | 5 |
| NAPHTHALENE | ND | 5 | 5 |
| O-XYLENE | ND | 5 | 5 |
| P-ISOPROPYLTOLUENE | ND | 5 | 5 |
| SEC-BUTYLBENZENE | ND | 5 | 5 |
| STYRENE | ND | 5 | 5 |
| TERT-BUTYLBENZENE | ND | 5 | 5 |
| TETRACHLOROETHYLENE | ND | 5 | 5 |
| TOLUENE | ND | 5 | 5 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| TRICHLOROETHENE | ND | 5 | 5 |
| TRICHLOROFUOROMETHANE | ND | 5 | 5 |
| VINYL CHLORIDE | ND | 5 | 5 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 100 | 62-139 | |
| TOLUENE-D8 | 102 | 75-125 | |
| BROMOFLUOROBENZENE | 107 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                 Date Extracted: 10/19/05 21:15
Sample ID    : 86-S1-131              Date Analyzed: 10/19/05 21:15
Lab Samp ID  : J053-02N               Dilution Factor: 1
Lab File ID  : RJ8279                 Matrix          : WATER
Ext Btch ID  : V003J23                % Moisture      : NA
Calib. Ref.  : RJ8044                 Instrument ID   : T-003
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 2-DICHLOROBENZENE | ND | .5 | .2 |
| 2-DICHLOROETHANE | ND | .5 | .2 |
| 2-DICHLOROPROPANE | ND | .5 | .2 |
| 3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 3-DICHLOROBENZENE | ND | .5 | .2 |
| 3-DICHLOROPROPANE | ND | .5 | .2 |
| 4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .5 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .5 |
| ACETONE | ND | 10 | .5 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | .5 | .2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 121 | 62-139 | |
| TOLUENE-D8 | 97 | 75-125 | |
| BROMOFLUOROBENZENE | 102 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/19/05 21:53
Sample ID    : 86-S1-132                Date Analyzed: 10/19/05 21:53
Lab Samp ID  : J053-03N                 Dilution Factor: 1
Lab File ID  : RJB280                   Matrix          : WATER
Ext Btch ID  : V003J23                  % Moisture      : NA
Calib. Ref.  : RJB044                   Instrument ID   : T-003
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1,2,2-TETRACHLOROETHANE | ND | 5 | 5 |
| 1,1,2-TRICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHANE | ND | 5 | 5 |
| 1,1-DICHLOROETHENE | ND | 5 | 5 |
| 1,1-DICHLOROPROPENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 5 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 5 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 5 |
| 1,2-DICHLOROBENZENE | ND | 5 | 5 |
| 1,2-DICHLOROETHANE | ND | 5 | 5 |
| 1,2-DICHLOROPROPANE | ND | 5 | 5 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROBENZENE | ND | 5 | 5 |
| 1,3-DICHLOROPROPANE | ND | 5 | 5 |
| 1,4-DICHLOROBENZENE | ND | 5 | 5 |
| 2,2-DICHLOROPROPANE | ND | 5 | 5 |
| 2-BUTANONE | ND | 5 | 5 |
| 2-CHLOROTOLUENE | ND | 5 | 5 |
| 2-HEXANONE | ND | 5 | 5 |
| 4-CHLOROTOLUENE | ND | 5 | 5 |
| 4-METHYL-2-PENTANONE | ND | 5 | 5 |
| ACETONE | ND | 5 | 5 |
| BENZENE | ND | 5 | 5 |
| BROMOBENZENE | ND | 5 | 5 |
| BROMOCHLOROMETHANE | ND | 5 | 5 |
| BROMODICHLOROMETHANE | ND | 5 | 5 |
| BROMOFORM | ND | 5 | 5 |
| BROMOMETHANE | ND | 5 | 5 |
| CARBON DISULFIDE | ND | 5 | 5 |
| CARBON TETRACHLORIDE | ND | 5 | 5 |
| CHLOROBENZENE | ND | 5 | 5 |
| CHLOROETHANE | ND | 5 | 5 |
| CHLOROFORM | ND | 5 | 5 |
| CHLOROMETHANE | ND | 5 | 5 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| DIBROMOCHLOROMETHANE | ND | 5 | 5 |
| DIBROMOMETHANE | ND | 5 | 5 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 5 |
| ETHYLBENZENE | ND | 5 | 5 |
| HEXACHLOROBUTADIENE | ND | 5 | 5 |
| ISOPROPYL BENZENE | ND | 5 | 5 |
| M/P-XYLENES | ND | 5 | 5 |
| METHYLENE CHLORIDE | ND | 5 | 5 |
| N-BUTYLBENZENE | ND | 5 | 5 |
| N-PROPYLBENZENE | ND | 5 | 5 |
| NAPHTHALENE | ND | 5 | 5 |
| O-XYLENE | ND | 5 | 5 |
| P-ISOPROPYLTOLUENE | ND | 5 | 5 |
| SEC-BUTYLBENZENE | ND | 5 | 5 |
| STYRENE | ND | 5 | 5 |
| TERT-BUTYLBENZENE | ND | 5 | 5 |
| TETRACHLOROETHYLENE | ND | 5 | 5 |
| TOLUENE | ND | 5 | 5 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 5 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 5 |
| TRICHLOROETHENE | ND | 5 | 5 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 5 |
| VINYL CHLORIDE | ND | 5 | 5 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 131 | 62-139 | |
| TOLUENE-D8 | 98 | 75-125 | |
| BROMOFLUOROBENZENE | 108 | 75-125 | |

R.L. : Reporting Limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                 Date Extracted: 10/19/05 22:31
Sample ID   : 86-S1-133              Date Analyzed: 10/19/05 22:31
Lab Samp ID : J053-04N               Dilution Factor: 1
Lab File ID : RJB281                 Matrix          : WATER
Ext Btch ID : V003J23                % Moisture      : NA
Calib. Ref. : RJB044                 Instrument ID   : T-003
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,2,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .5 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .5 |
| ACETONE | ND | 10 | .2 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | .5 | .2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 133 | 62-139 | |
| TOLUENE-D8 | 99 | 75-125 | |
| BROMOFLUOROBENZENE | 105 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/19/05 23:09
Sample ID   : 86-S1-134               Date Analyzed: 10/19/05 23:09
Lab Samp ID : J053-05N                Dilution Factor: 1
Lab File ID : RJB282                  Matrix      : WATER
Ext Btch ID : V003J23                 % Moisture   : NA
Calib. Ref. : RJB044                  Instrument ID : T-003
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .3 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .1 | .3 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .3 |
| 1,1-DICHLOROETHANE | ND | .5 | .3 |
| 1,1-DICHLOROETHENE | ND | .5 | .3 |
| 1,1-DICHLOROPROPENE | ND | .5 | .3 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .3 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .3 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .3 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .3 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .1 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .3 |
| 1,2-DICHLOROPROPANE | ND | .5 | .3 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .3 |
| 1,3-DICHLOROBENZENE | ND | .5 | .3 |
| 1,3-DICHLOROPROPANE | ND | .5 | .3 |
| 1,4-DICHLOROBENZENE | ND | .5 | .3 |
| 2,2-DICHLOROPROPANE | ND | .5 | .3 |
| 2-BUTANONE | ND | 10 | .3 |
| 2-CHLOROTOLUENE | ND | .5 | .3 |
| 2-HEXANONE | ND | 10 | .3 |
| 4-CHLOROTOLUENE | ND | .5 | .3 |
| 4-METHYL-2-PENTANONE | ND | 10 | .3 |
| ACETONE | ND | 10 | .3 |
| BENZENE | ND | .5 | .3 |
| BROMOBENZENE | ND | .5 | .3 |
| BROMOCHLOROMETHANE | ND | .5 | .3 |
| BROMODICHLOROMETHANE | ND | .5 | .3 |
| BROMOFORM | ND | .5 | .3 |
| BROMOMETHANE | ND | .5 | .3 |
| CARBON DISULFIDE | ND | .5 | .3 |
| CARBON TETRACHLORIDE | ND | .5 | .3 |
| CHLOROBENZENE | ND | .5 | .3 |
| CHLOROETHANE | ND | .5 | .3 |
| CHLOROFORM | ND | .5 | .3 |
| CHLOROMETHANE | ND | .5 | .3 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .3 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .3 |
| DIBROMOCHLOROMETHANE | ND | .5 | .3 |
| DIBROMOMETHANE | ND | .5 | .3 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .3 |
| ETHYLBENZENE | ND | .5 | .3 |
| HEXACHLOROBUTADIENE | ND | .5 | .3 |
| ISOPROPYL BENZENE | ND | .5 | .3 |
| M/P-XYLENES | ND | .5 | .3 |
| METHYLENE CHLORIDE | ND | .5 | .3 |
| N-BUTYLBENZENE | ND | .5 | .3 |
| N-PROPYLBENZENE | ND | .5 | .3 |
| NAPHTHALENE | ND | .5 | .3 |
| O-XYLENE | ND | .5 | .3 |
| P-ISOPROPYLTOLUENE | ND | .5 | .3 |
| SEC-BUTYLBENZENE | ND | .5 | .3 |
| STYRENE | ND | .5 | .3 |
| TERT-BUTYLBENZENE | ND | .5 | .3 |
| TETRACHLOROETHYLENE | ND | .5 | .3 |
| TOLUENE | ND | .5 | .3 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .3 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .3 |
| TRICHLOROETHENE | ND | .5 | .3 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .3 |
| VINYL CHLORIDE | ND | .1 | .3 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 135 | 62-139 |
| TOLUENE-D8 | 98 | 75-125 |
| BROMOFLUOROBENZENE | 109 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                 Date Extracted: 10/19/05 23:47
Sample ID   : 86-S1-135              Date Analyzed: 10/19/05 23:47
Lab Samp ID : J053-06W               Dilution Factor: 1
Lab File ID : RJB283                 Matrix          : WATER
Ext Btch ID : V003J23                % Moisture      : NA
Calib. Ref. : RJB044                 Instrument ID   : T-003
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .3 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .3 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .1 | .05 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .3 |
| 1,1-DICHLOROETHANE | ND | .5 | .3 |
| 1,1-DICHLOROETHENE | ND | .5 | .3 |
| 1,1-DICHLOROPROPENE | ND | .5 | .3 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .3 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .3 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .3 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .3 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .3 |
| 1,2-DICHLOROBENZENE | ND | .5 | .3 |
| 1,2-DICHLOROETHANE | ND | .5 | .3 |
| 1,2-DICHLOROPROPANE | ND | .5 | .3 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .3 |
| 1,3-DICHLOROBENZENE | ND | .5 | .3 |
| 1,3-DICHLOROPROPANE | ND | .5 | .3 |
| 1,4-DICHLOROBENZENE | ND | .5 | .3 |
| 2,2-DICHLOROPROPANE | ND | .5 | .3 |
| 2-BUTANONE | ND | .5 | .3 |
| 2-CHLOROTOLUENE | ND | .5 | .3 |
| 2-HEXANONE | ND | .5 | .3 |
| 4-CHLOROTOLUENE | ND | .5 | .3 |
| 4-METHYL-2-PENTANONE | ND | .5 | .3 |
| ACETONE | ND | .5 | .3 |
| BENZENE | ND | .5 | .3 |
| BROMOBENZENE | ND | .5 | .3 |
| BROMOCHLOROMETHANE | ND | .5 | .3 |
| BROMODICHLOROMETHANE | ND | .5 | .3 |
| BROMOFORM | ND | .5 | .3 |
| BROMOMETHANE | ND | .5 | .3 |
| CARBON DISULFIDE | ND | .5 | .3 |
| CARBON TETRACHLORIDE | ND | .5 | .3 |
| CHLOROBENZENE | ND | .5 | .3 |
| CHLOROETHANE | ND | .5 | .3 |
| CHLOROFORM | ND | .5 | .3 |
| CHLOROMETHANE | ND | .5 | .3 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .3 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .3 |
| DIBROMOCHLOROMETHANE | ND | .5 | .3 |
| DIBROMOMETHANE | ND | .5 | .3 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .3 |
| ETHYLBENZENE | ND | .5 | .3 |
| HEXACHLOROBUTADIENE | ND | .5 | .3 |
| ISOPROPYL BENZENE | ND | .5 | .3 |
| M/P-XYLENES | ND | .5 | .3 |
| METHYLENE CHLORIDE | ND | .5 | .3 |
| N-BUTYLBENZENE | ND | .5 | .3 |
| N-PROPYLBENZENE | ND | .5 | .3 |
| NAPHTHALENE | ND | .5 | .3 |
| O-XYLENE | ND | .5 | .3 |
| P-ISOPROPYLTOLUENE | ND | .5 | .3 |
| SEC-BUTYLBENZENE | ND | .5 | .3 |
| STYRENE | ND | .5 | .3 |
| TERT-BUTYLBENZENE | ND | .5 | .3 |
| TETRACHLOROETHYLENE | ND | .5 | .3 |
| TOLUENE | ND | .5 | .3 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .3 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .3 |
| TRICHLOROETHENE | ND | .5 | .3 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .3 |
| VINYL CHLORIDE | ND | .5 | .3 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 135 | 62-139 | |
| TOLUENE-D8 | 96 | 75-125 | |
| BROMOFLUOROBENZENE | 109 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/16/05 07:59
Sample ID   : 86-S1-136               Date Analyzed: 10/16/05 07:59
Lab Samp ID : J053-07                 Dilution Factor: 1
Lab File ID : RJ0485                  Matrix      : WATER
Ext Btch ID : V005J40                 % Moisture   : NA
Calib. Ref. : R10499                  Instrument ID : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .1 | .3 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .2 | .1 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .1 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .1 |
| ACETONE | ND | 10 | .2 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .1 | .5 |
| BROMOMETHANE | ND | .1 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .1 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .1 | .5 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .1 | .5 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .1 | .3 |
| METHYLENE CHLORIDE | ND | .2 | .1 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .1 | .5 |
| VINYL CHLORIDE | ND | .1 | .5 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 124 | 62-139 |
| TOLUENE-D8 | 101 | 75-125 |
| BROMOFLUOROBENZENE | 99 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
 VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/16/05 08:36
Sample ID    : 86-S1-138                Date Analyzed: 10/16/05 08:36
Lab Samp ID  : J053-08                  Dilution Factor: 1
Lab File ID  : RJO486                    Matrix          : WATER
Ext Btch ID  : V005J40                  % Moisture      : NA
Calib. Ref.  : R10499                    Instrument ID   : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .3 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .4 | .3 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .3 |
| 1,1-DICHLOROETHANE | ND | .5 | .3 |
| 1,1-DICHLOROETHENE | ND | .5 | .3 |
| 1,1-DICHLOROPROPENE | ND | .5 | .3 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .3 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .3 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .3 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .3 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .4 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .3 |
| 1,2-DICHLOROPROPANE | ND | .5 | .3 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .3 |
| 1,3-DICHLOROBENZENE | ND | .5 | .3 |
| 1,3-DICHLOROPROPANE | ND | .5 | .3 |
| 1,4-DICHLOROBENZENE | ND | .5 | .3 |
| 2,2-DICHLOROPROPANE | ND | .5 | .3 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .3 |
| 2-HEXANONE | ND | 10 | .4 |
| 4-CHLOROTOLUENE | ND | .5 | .3 |
| 4-METHYL-2-PENTANONE | ND | 10 | .4 |
| ACETONE | ND | 10 | .3 |
| BENZENE | ND | .5 | .3 |
| BROMOBENZENE | ND | .5 | .3 |
| BROMOCHLOROMETHANE | ND | .5 | .3 |
| BROMODICHLOROMETHANE | ND | .5 | .3 |
| BROMOFORM | ND | .1 | .3 |
| BROMOMETHANE | ND | .1 | .3 |
| CARBON DISULFIDE | ND | .5 | .3 |
| CARBON TETRACHLORIDE | ND | .5 | .3 |
| CHLOROBENZENE | ND | .5 | .3 |
| CHLOROETHANE | ND | .1 | .3 |
| CHLOROFORM | ND | .5 | .3 |
| CHLOROMETHANE | ND | .1 | .3 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .3 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .3 |
| DIBROMOCHLOROMETHANE | ND | .5 | .3 |
| DIBROMOMETHANE | ND | .5 | .3 |
| DICHLORODIFLUOROMETHANE | ND | .1 | .3 |
| ETHYLBENZENE | ND | .5 | .3 |
| HEXACHLOROBTADIENE | ND | .5 | .3 |
| ISOPROPYL BENZENE | ND | .5 | .3 |
| M/P-XYLENES | ND | .1 | .3 |
| METHYLENE CHLORIDE | ND | .2 | .4 |
| N-BUTYLBENZENE | ND | .5 | .3 |
| N-PROPYLBENZENE | ND | .5 | .3 |
| NAPHTHALENE | ND | .5 | .3 |
| O-XYLENE | ND | .5 | .3 |
| P-ISOPROPYLTOLUENE | ND | .5 | .3 |
| SEC-BUTYLBENZENE | ND | .5 | .3 |
| STYRENE | ND | .5 | .3 |
| TERT-BUTYLBENZENE | ND | .5 | .3 |
| TETRACHLOROETHYLENE | ND | .5 | .3 |
| TOLUENE | ND | .5 | .3 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .3 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .3 |
| TRICHLOROETHENE | ND | .5 | .3 |
| TRICHLOROFLUOROMETHANE | ND | .1 | .3 |
| VINYL CHLORIDE | ND | .1 | .3 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 107 | 62-139 | |
| TOLUENE-D8 | 104 | 75-125 | |
| BROMOFLUOROBENZENE | 106 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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=====
Client   : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project  : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.: 05J053                  Date Extracted: 10/16/05 09:14
Sample ID: 86-S1-126               Date Analyzed: 10/16/05 09:14
Lab Smp ID: J053-09                Dilution Factor: 1
Lab File ID: RJ0487                Matrix       : WATER
Ext Btch ID: V005J40               % Moisture   : NA
Calib. Ref.: RIQ499                Instrument ID : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,2-TETRACHLOROETHANE | ND | 5 | 3 |
| 1,1,1-TRICHLOROETHANE | ND | 5 | 3 |
| 1,2,2-TETRACHLOROETHANE | ND | 5 | 3 |
| 1,2,1-TRICHLOROETHANE | ND | 5 | 3 |
| 1,1-DICHLOROETHANE | ND | 5 | 3 |
| 1,1-DICHLOROETHENE | ND | 5 | 3 |
| 1,1-DICHLOROPROPENE | ND | 5 | 3 |
| 1,2,3-TRICHLOROBENZENE | ND | 5 | 3 |
| 1,2,3-TRICHLOROPROPANE | ND | 5 | 3 |
| 1,2,4-TRICHLOROBENZENE | ND | 5 | 3 |
| 1,2,4-TRIMETHYLBENZENE | ND | 5 | 3 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | 5 | 3 |
| 1,2-DICHLOROBENZENE | ND | 5 | 3 |
| 1,2-DICHLOROETHANE | ND | 5 | 3 |
| 1,2-DICHLOROPROPANE | ND | 5 | 3 |
| 1,3,5-TRIMETHYLBENZENE | ND | 5 | 3 |
| 1,3-DICHLOROBENZENE | ND | 5 | 3 |
| 1,3-DICHLOROPROPANE | ND | 5 | 3 |
| 1,4-DICHLOROBENZENE | ND | 5 | 3 |
| 2,2-DICHLOROPROPANE | ND | 5 | 3 |
| 2-BUTANONE | ND | 5 | 3 |
| 2-CHLOROTOLUENE | ND | 5 | 3 |
| 2-HEXANONE | ND | 5 | 3 |
| 4-CHLOROTOLUENE | ND | 5 | 3 |
| 4-METHYL-2-PENTANONE | ND | 5 | 3 |
| ACETONE | ND | 5 | 3 |
| BENZENE | ND | 5 | 3 |
| BROMOBENZENE | ND | 5 | 3 |
| BROMOCHLOROMETHANE | ND | 5 | 3 |
| BROMODICHLOROMETHANE | ND | 5 | 3 |
| BROMOFORM | ND | 5 | 3 |
| BROMOMETHANE | ND | 5 | 3 |
| CARBON DISULFIDE | ND | 5 | 3 |
| CARBON TETRACHLORIDE | ND | 5 | 3 |
| CHLOROBENZENE | ND | 5 | 3 |
| CHLOROETHANE | ND | 5 | 3 |
| CHLOROFORM | ND | 5 | 3 |
| CHLOROMETHANE | ND | 5 | 3 |
| CIS-1,2-DICHLOROETHENE | ND | 5 | 3 |
| CIS-1,3-DICHLOROPROPENE | ND | 5 | 3 |
| DIBROMOCHLOROMETHANE | ND | 5 | 3 |
| DIBROMOMETHANE | ND | 5 | 3 |
| DICHLORODIFLUOROMETHANE | ND | 5 | 3 |
| ETHYLBENZENE | ND | 5 | 3 |
| HEXACHLOROBUTADIENE | ND | 5 | 3 |
| ISOPROPYL BENZENE | ND | 5 | 3 |
| M/P-XYLENES | ND | 5 | 3 |
| METHYLENE CHLORIDE | ND | 5 | 3 |
| N-BUTYLBENZENE | ND | 5 | 3 |
| N-PROPYLBENZENE | ND | 5 | 3 |
| NAPHTHALENE | ND | 5 | 3 |
| O-XYLENE | ND | 5 | 3 |
| P-ISOPROPYLTOLUENE | ND | 5 | 3 |
| SEC-BUTYLBENZENE | ND | 5 | 3 |
| STYRENE | ND | 5 | 3 |
| TERT-BUTYLBENZENE | ND | 5 | 3 |
| TETRACHLOROETHYLENE | ND | 5 | 3 |
| TOLUENE | ND | 5 | 3 |
| TRANS-1,2-DICHLOROETHENE | ND | 5 | 3 |
| TRANS-1,3-DICHLOROPROPENE | ND | 5 | 3 |
| TRICHLOROETHENE | ND | 5 | 3 |
| TRICHLOROFLUOROMETHANE | ND | 5 | 3 |
| VINYL CHLORIDE | ND | 5 | 3 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 122 | 62-138 | |
| TOLUENE-D8 | 101 | 75-125 | |
| BROMOFLUOROBENZENE | 102 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/16/05 09:52
Sample ID    : 86-S1-128                Date Analyzed: 10/16/05 09:52
Lab Smp ID   : J053-10                  Dilution Factor: 1
Lab File ID  : RJ0488                   Matrix : WATER
Ext Btch ID  : V005J40                  % Moisture : NA
Calib. Ref.  : R10499                   Instrument ID : T-005
=====
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .2 | .1 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .5 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .5 |
| ACETONE | ND | 10 | .5 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .1 | .1 |
| BROMOMETHANE | ND | .1 | .1 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .1 | .1 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .1 | .1 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .1 | .1 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .1 | .1 |
| METHYLENE CHLORIDE | ND | .2 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .1 | .1 |
| VINYL CHLORIDE | ND | .1 | .1 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 125 | 62-139 |
| TOLUENE-D8 | 100 | 75-125 |
| BROMOFLUOROBENZENE | 101 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/16/05 10:29
Sample ID    : 86-S1-129               Date Analyzed: 10/16/05 10:29
Lab Samp ID  : J053-11                 Dilution Factor: 1
Lab File ID  : RJ0489                  Matrix          : WATER
Ext Btch ID  : V005J40                 % Moisture      : NA
Calib. Ref.  : RI0499                  Instrument ID   : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .2 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .2 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .2 |
| ACETONE | ND | 10 | .2 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | .5 | .2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|-----------------------|------------|----------|
| 1,2-DICHLOROETHANE-D4 | 128 | 62-139 |
| TOLUENE-D8 | 101 | 75-125 |
| BROMOFLUOROBENZENE | 100 | 75-125 |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

SW 5030B/82608
 VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/16/05 11:07
Sample ID    : 86-S1-130               Date Analyzed: 10/16/05 11:07
Lab Samp ID  : J053-12                 Dilution Factor: 1
Lab File ID  : RJ0490                  Matrix       : WATER
Ext Btch ID  : V005J40                 % Moisture   : NA
Calib. Ref.  : RI0499                  Instrument ID : T-005
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 1,1,1,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,1-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1,2,2-TETRACHLOROETHANE | ND | .5 | .2 |
| 1,1,2-TRICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHANE | ND | .5 | .2 |
| 1,1-DICHLOROETHENE | ND | .5 | .2 |
| 1,1-DICHLOROPROPENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,3-TRICHLOROPROPANE | ND | .5 | .2 |
| 1,2,4-TRICHLOROBENZENE | ND | .5 | .2 |
| 1,2,4-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,2-DIBROMO-3-CHLOROPROPANE | ND | .5 | .2 |
| 1,2-DICHLOROBENZENE | ND | .5 | .2 |
| 1,2-DICHLOROETHANE | ND | .5 | .2 |
| 1,2-DICHLOROPROPANE | ND | .5 | .2 |
| 1,3,5-TRIMETHYLBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROBENZENE | ND | .5 | .2 |
| 1,3-DICHLOROPROPANE | ND | .5 | .2 |
| 1,4-DICHLOROBENZENE | ND | .5 | .2 |
| 2,2-DICHLOROPROPANE | ND | .5 | .2 |
| 2-BUTANONE | ND | 10 | .5 |
| 2-CHLOROTOLUENE | ND | .5 | .2 |
| 2-HEXANONE | ND | 10 | .5 |
| 4-CHLOROTOLUENE | ND | .5 | .2 |
| 4-METHYL-2-PENTANONE | ND | 10 | .5 |
| ACETONE | 9.3J | 10 | .2 |
| BENZENE | ND | .5 | .2 |
| BROMOBENZENE | ND | .5 | .2 |
| BROMOCHLOROMETHANE | ND | .5 | .2 |
| BROMODICHLOROMETHANE | ND | .5 | .2 |
| BROMOFORM | ND | .5 | .2 |
| BROMOMETHANE | ND | .5 | .2 |
| CARBON DISULFIDE | ND | .5 | .2 |
| CARBON TETRACHLORIDE | ND | .5 | .2 |
| CHLOROBENZENE | ND | .5 | .2 |
| CHLOROETHANE | ND | .5 | .2 |
| CHLOROFORM | ND | .5 | .2 |
| CHLOROMETHANE | ND | .5 | .2 |
| CIS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| CIS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| DIBROMOCHLOROMETHANE | ND | .5 | .2 |
| DIBROMOMETHANE | ND | .5 | .2 |
| DICHLORODIFLUOROMETHANE | ND | .5 | .2 |
| ETHYLBENZENE | ND | .5 | .2 |
| HEXACHLOROBUTADIENE | ND | .5 | .2 |
| ISOPROPYL BENZENE | ND | .5 | .2 |
| M/P-XYLENES | ND | .5 | .2 |
| METHYLENE CHLORIDE | ND | .5 | .2 |
| N-BUTYLBENZENE | ND | .5 | .2 |
| N-PROPYLBENZENE | ND | .5 | .2 |
| NAPHTHALENE | ND | .5 | .2 |
| O-XYLENE | ND | .5 | .2 |
| P-ISOPROPYLTOLUENE | ND | .5 | .2 |
| SEC-BUTYLBENZENE | ND | .5 | .2 |
| STYRENE | ND | .5 | .2 |
| TERT-BUTYLBENZENE | ND | .5 | .2 |
| TETRACHLOROETHYLENE | ND | .5 | .2 |
| TOLUENE | ND | .5 | .2 |
| TRANS-1,2-DICHLOROETHENE | ND | .5 | .2 |
| TRANS-1,3-DICHLOROPROPENE | ND | .5 | .2 |
| TRICHLOROETHENE | ND | .5 | .2 |
| TRICHLOROFLUOROMETHANE | ND | .5 | .2 |
| VINYL CHLORIDE | ND | .5 | .2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 1,2-DICHLOROETHANE-D4 | 121 | 62-139 | |
| TOLUENE-D8 | 101 | 75-125 | |
| BROMOFLUOROBENZENE | 99 | 75-125 | |

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, SITE 1, CTO 86

SDG: 05J053

**SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS**

Ten water samples were received on 10/07/05 for Semi Volatile Organic analysis by Method 3520C/8270C in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample J053-10 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

The last internal standard in sample J053-12 in both 1X and 2X analyses were out of QC, probably due to matrix interference. Both sets of results were reported.

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/11/05 20:00
Sample ID    : 86-S1-131               Date Analyzed: 10/14/05 18:23
Lab Samp ID  : J053-02                  Dilution Factor: .94
Lab File ID  : RJX085                    Matrix: WATER
Ext Btch ID  : SVJ009W                   % Moisture: NA
Calib. Ref.: R1X122                     Instrument ID: T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIBETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 60 | 25-134 |
| 2-FLUOROBIPHENYL | 52 | 43-125 |
| 2-FLUOROPHENOL | 44 | 25-125 |
| NITROBENZENE-D5 | 52 | 32-125 |
| PHENOL-D5 | 47 | 25-125 |
| TERPHENYL-D14 | 79 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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| | |
|-------------------------------|--------------------------------|
| Client : TETRA TECH EC, INC. | Date Collected: 10/06/05 |
| Project : MFA, SITE 1, CTO 86 | Date Received: 10/07/05 |
| Batch No. : 05J053 | Date Extracted: 10/11/05 20:00 |
| Sample ID: 86-S1-132 | Date Analyzed: 10/14/05 18:49 |
| Lab Samp ID: J053-03 | Dilution Factor: 1 |
| Lab File ID: RJX086 | Matrix : WATER |
| Ext Btch ID: SVJ009W | % Moisture : NA |
| Calib. Ref.: R1X122 | Instrument ID : T-042 |

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 10 | 5 |
| 2,4,6-TRICHLOROPHENOL | ND | 10 | 5 |
| 2,4-DICHLOROPHENOL | ND | 10 | 5 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 5 |
| 2,4-DINITROPHENOL | ND | 20 | 10 |
| 2,4-DINITROTOLUENE | ND | 20 | 10 |
| 2,6-DINITROTOLUENE | ND | 20 | 6 |
| 2-CHLORONAPHTHALENE | ND | 10 | 5 |
| 2-CHLOROPHENOL | ND | 10 | 5 |
| 2-METHYLNAPHTHALENE | ND | 10 | 5 |
| 2-METHYLPHENOL | ND | 10 | 5 |
| 2-NITROANILINE | ND | 20 | 6 |
| 2-NITROPHENOL | ND | 10 | 5 |
| 3,3'-DICHLOROBENZIDINE | ND | 10 | 5 |
| 3-NITROANILINE | ND | 10 | 5 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 20 | 10 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 20 | 7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 10 | 5 |
| 4-CHLOROANILINE | ND | 10 | 5 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 10 | 5 |
| 4-METHYLPHENOL (1) | ND | 10 | 5 |
| 4-NITROANILINE | ND | 10 | 5 |
| 4-NITROPHENOL | ND | 10 | 5 |
| ACENAPHTHENE | ND | 10 | 5 |
| ACENAPHTHYLENE | ND | 10 | 5 |
| ANTHRACENE | ND | 10 | 5 |
| BENZO(A)ANTHRACENE | ND | 10 | 5 |
| BENZO(A)PYRENE | ND | 10 | 5 |
| BENZO(B)FLUORANTHENE | ND | 10 | 5 |
| BENZO(K)FLUORANTHENE | ND | 10 | 5 |
| BENZO(G,H,I)PERYLENE | ND | 10 | 5 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 10 | 5 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 5 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 10 | 5 |
| BIS(2-ETHYLHEXYL)PHthalate | ND | 20 | 10 |
| BUTYLBENZYLPHthalate | ND | 10 | 5 |
| CHRYSENE | ND | 10 | 5 |
| DI-N-BUTYLPHthalate | ND | 10 | 5 |
| DI-N-OCTYLPHthalate | ND | 10 | 5 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 5 |
| DIBENZOFURAN | ND | 10 | 5 |
| DIBETHYLPHthalate | ND | 20 | 5 |
| DIMETHYLPHthalate | ND | 20 | 5 |
| FLUORANTHENE | ND | 10 | 5 |
| FLUORENE | ND | 10 | 5 |
| HEXACHLOROBENZENE | ND | 20 | 5 |
| HEXACHLOROCYCLOPENTADIENE | ND | 10 | 5 |
| HEXACHLOROETHANE | ND | 10 | 5 |
| INDENO(1,2,3-CD)PYRENE | ND | 10 | 5 |
| ISOPHCHORONE | ND | 10 | 5 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 10 | 5 |
| N-NITROSODIPHENYLAMINE (2) | ND | 10 | 5 |
| NITROBENZENE | ND | 10 | 5 |
| PENTACHLOROPHENOL | ND | 20 | 10 |
| PHENANTHRENE | ND | 20 | 5 |
| PHENOL | ND | 10 | 5 |
| PYRENE | ND | 10 | 5 |
| 1,1'-BIPHENYL | ND | 10 | 2 |
| ACETOPHENONE | ND | 20 | 10 |
| ATRAZINE | ND | 10 | 5 |
| BENZALDEHYDE | ND | 10 | 5 |
| CAPROLACTAM | ND | 10 | 5 |
| CARBAZOLE | ND | 10 | 5 |
| ----- | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 70 | 25-134 | |
| 2-FLUOROBIPHENYL | 61 | 43-125 | |
| 2-FLUOROPHENOL | 46 | 25-125 | |
| NITROBENZENE-D5 | 55 | 32-125 | |
| PHENOL-D5 | 52 | 25-125 | |
| TERPHENYL-D14 | 89 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                 Date Extracted: 10/11/05 20:00
Sample ID   : 86-S1-133              Date Analyzed: 10/14/05 19:14
Lab Samp ID : J053-04                Dilution Factor: .94
Lab File ID : RJX087                 Matrix      : WATER
Ext Btch ID : SVJ009W                % Moisture   : NA
Calib. Ref. : R1X122                 Instrument ID : T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 9.4 | 4.7 |
| 2-NITROANILINE | ND | 19 | 5.6 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 9.4 | 4.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.4 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 9.4 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 9.4 | 4.7 |
| 4-NITROPHENOL | ND | 19 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,1)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.4 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIMETHYLPHTHALATE | ND | 19 | 5.6 |
| DIMETHYLPHTHALATE | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 63 | 25-134 |
| 2-FLUOROBIPHENYL | 61 | 43-125 |
| 2-FLUOROPHENOL | 52 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-125 |
| PHENOL-D5 | 55 | 25-125 |
| TERPHENYL-D14 | 91 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 20:00
Sample ID   : 86-S1-134               Date Analyzed: 10/14/05 19:39
Lab Samp ID : J053-05                 Dilution Factor: .97
Lab File ID : RJX088                 Matrix          : WATER
Ext Btch ID : SVJ009W                % Moisture      : NA
Calib. Ref. : R1X122                 Instrument ID   : T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4-DICHLOROPHENOL | ND | 9.7 | 4.9 |
| 2,4-DIMETHYLPHENOL | ND | 19 | 9.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.7 |
| 2,4-DINITROTOLUENE | ND | 19 | 5.8 |
| 2,6-DINITROTOLUENE | ND | 9.7 | 4.9 |
| 2-CHLORONAPHTHALENE | ND | 9.7 | 4.9 |
| 2-CHLOROPHENOL | ND | 9.7 | 4.9 |
| 2-METHYLNAPHTHALENE | ND | 9.7 | 4.9 |
| 2-METHYLPHENOL | ND | 19 | 5.8 |
| 2-NITROANILINE | ND | 9.7 | 4.9 |
| 2-NITROPHENOL | ND | 9.7 | 4.9 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.7 | 4.9 |
| 3-NITROANILINE | ND | 19 | 9.7 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.8 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.7 | 4.9 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.7 | 4.9 |
| 4-CHLOROANILINE | ND | 9.7 | 4.9 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.7 | 4.9 |
| 4-METHYLPHENOL (1) | ND | 9.7 | 4.9 |
| 4-NITROANILINE | ND | 19 | 4.9 |
| 4-NITROPHENOL | ND | 9.7 | 4.9 |
| ACENAPHTHENE | ND | 9.7 | 4.9 |
| ACENAPHTHYLENE | ND | 9.7 | 4.9 |
| ANTHRACENE | ND | 9.7 | 4.9 |
| BENZO(A)ANTHRACENE | ND | 9.7 | 4.9 |
| BENZO(A)PYRENE | ND | 9.7 | 4.9 |
| BENZO(B)FLUORANTHENE | ND | 9.7 | 4.9 |
| BENZO(K)FLUORANTHENE | ND | 9.7 | 4.9 |
| BENZO(G,H,I)PERYLENE | ND | 9.7 | 4.9 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.7 | 4.9 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.7 | 4.9 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.7 |
| BIS(2-ETHYLNEXYL)PHthalate | ND | 9.7 | 4.9 |
| BUTYLBENZYLPHthalate | ND | 9.7 | 4.9 |
| CHRYSENE | ND | 9.7 | 4.9 |
| D1-N-BUTYLPHthalate | ND | 9.7 | 4.9 |
| D1-N-OCTYLPHthalate | ND | 9.7 | 4.9 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.7 | 4.9 |
| DIBENZOFURAN | ND | 19 | 5.8 |
| DIETHYLPHthalate | ND | 19 | 4.9 |
| DMETHYLPHthalate | ND | 9.7 | 4.9 |
| FLUORANTHENE | ND | 9.7 | 4.9 |
| FLUORENE | ND | 19 | 5.8 |
| HEXACHLOROBENZENE | ND | 9.7 | 4.9 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.7 | 4.9 |
| HEXACHLOROETHANE | ND | 9.7 | 4.9 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.7 | 4.9 |
| ISOPHORONE | ND | 9.7 | 4.9 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.7 | 4.9 |
| N-NITROSDIPHENYLAMINE (2) | ND | 9.7 | 4.9 |
| NITROBENZENE | ND | 19 | 9.7 |
| PENTACHLOROPHENOL | ND | 19 | 5.8 |
| PHENANTHRENE | ND | 9.7 | 4.9 |
| PHENOL | ND | 9.7 | 4.9 |
| PYRENE | ND | 9.7 | 4.9 |
| 1,1'-BIPHENYL | ND | 9.7 | 2.4 |
| ACETOPHENONE | ND | 19 | 9.7 |
| ATRAZINE | ND | 9.7 | 4.9 |
| BENZALDEHYDE | ND | 9.7 | 4.9 |
| CAPROLACTAM | ND | 9.7 | 4.9 |
| CARBAZOLE | ND | 9.7 | 4.9 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 61 | 25-134 |
| 2-FLUOROBIPHENYL | 59 | 43-125 |
| 2-FLUOROPHENOL | 53 | 25-125 |
| NITROBENZENE-D5 | 60 | 32-125 |
| PHENOL-D5 | 54 | 25-125 |
| TERPHENYL-D14 | 86 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 20:00
Sample ID   : 86-S1-135                Date Analyzed: 10/14/05 20:05
Lab. Samp ID: J053-06                  Dilution Factor: .94
Lab File ID : RJX089                   Matrix : WATER
Ext Btch ID : SVJ009W                  % Moisture : NA
Calib. Ref. : RIX122                   Instrument ID : T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 5.6 |
| 2,6-DINITROTOLUENE | ND | 9.4 | 4.7 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 19 | 5.6 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 19 | 9.4 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 19 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-ETHYLHEXYL)PHthalate | ND | 19 | 9.4 |
| BUTYLBENZYLPHthalate | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| D1-N-BUTYLPHthalate | ND | 9.4 | 4.7 |
| D1-N-OCTYLPHthalate | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 9.4 | 4.7 |
| DIETHYLPHthalate | ND | 19 | 5.6 |
| DIMETHYLPHthalate | ND | 19 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 9.4 | 4.7 |
| HEXACHLOROBENZENE | ND | 19 | 5.6 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSO-DIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 9.4 | 4.7 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| 2,4,6-TRIBROMOPHENOL | 62 | 25-134 | |
| 2-FLUOROBIPHENYL | 64 | 43-125 | |
| 2-FLUOROPHENOL | 55 | 25-125 | |
| NITROBENZENE-D5 | 63 | 32-125 | |
| PHENOL-D5 | 55 | 25-125 | |
| TERPHENYL-D14 | 81 | 42-126 | |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/11/05 20:00
Sample ID    : 86-S1-136                Date Analyzed: 10/14/05 20:30
Lab Samp ID  : J053-07                  Dilution Factor: .95
Lab File ID  : RJX090                    Matrix: WATER
Ext Btch ID  : SVJ009W                   % Moisture: NA
Calib. Ref.  : RIX122                    Instrument ID : T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 9.5 | 4.8 |
| 2,4-DINITROPHENOL | ND | 19 | 9.5 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.5 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.7 |
| 2-CHLORONAPHTHALENE | ND | 9.5 | 4.8 |
| 2-CHLOROPHENOL | ND | 9.5 | 4.8 |
| 2-METHYLNAPHTHALENE | ND | 9.5 | 4.8 |
| 2-METHYLPHENOL | ND | 9.5 | 4.8 |
| 2-NITROANILINE | ND | 19 | 5.7 |
| 2-NITROPHENOL | ND | 9.5 | 4.8 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.5 | 4.8 |
| 3-NITROANILINE | ND | 9.5 | 4.8 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 9.5 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 19 | 6.6 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.5 | 4.8 |
| 4-CHLOROANILINE | ND | 9.5 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 9.5 | 4.8 |
| 4-NITROANILINE | ND | 9.5 | 4.8 |
| 4-NITROPHENOL | ND | 19 | 4.8 |
| ACENAPHTHENE | ND | 9.5 | 4.8 |
| ACENAPHTHYLENE | ND | 9.5 | 4.8 |
| ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)PYRENE | ND | 9.5 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.5 | 4.6 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.5 |
| BUTYLBENZYLPHTHALATE | ND | 9.5 | 4.8 |
| CHRYSENE | ND | 9.5 | 4.8 |
| D1-N-BUTYLPHTHALATE | ND | 9.5 | 4.8 |
| D1-N-OCTYLPHTHALATE | ND | 9.5 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.5 | 4.8 |
| DIBENZOFURAN | ND | 9.5 | 4.8 |
| DIMETHYLPHTHALATE | ND | 19 | 5.7 |
| DIMETHYLPHTHALATE | ND | 19 | 4.8 |
| FLUORANTHENE | ND | 9.5 | 4.8 |
| FLUORENE | ND | 9.5 | 4.8 |
| HEXACHLOROBENZENE | ND | 19 | 5.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.5 | 4.8 |
| HEXACHLOROETHANE | ND | 9.5 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.5 | 4.8 |
| ISOPHORONE | ND | 9.5 | 4.8 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.5 | 4.8 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.5 | 4.8 |
| NITROBENZENE | ND | 9.5 | 4.8 |
| PENTACHLOROPHENOL | ND | 19 | 9.5 |
| PHENANTHRENE | ND | 19 | 5.7 |
| PHENOL | ND | 9.5 | 4.8 |
| PYRENE | ND | 9.5 | 4.8 |
| 1,1'-BIPHENYL | ND | 9.5 | 2.4 |
| ACETOPHENONE | ND | 19 | 9.5 |
| ATRAZINE | ND | 9.5 | 4.8 |
| BENZALDEHYDE | ND | 9.5 | 4.8 |
| CAPROLACTAM | ND | 9.5 | 4.8 |
| CARBAZOLE | ND | 9.5 | 4.8 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 70 | 25-134 |
| 2-FLUOROBIPHENYL | 65 | 43-125 |
| 2-FLUOROPHENOL | 52 | 25-125 |
| NITROBENZENE-D5 | 57 | 32-125 |
| PHENOL-D5 | 58 | 25-125 |
| TERPHENYL-D14 | 87 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC. Date Collected: 10/06/05
Project : MFA, SITE 1, CTO 86 Date Received: 10/07/05
Batch No. : 05J053 Date Extracted: 10/11/05 20:00
Sample ID: 86-S1-126 Date Analyzed: 10/14/05 20:56
Lab. Samp ID: J053-09 Dilution Factor: 1
Lab File ID: RJX091 Matrix : WATER
Ext Btch ID: SVJ009W % Moisture : NA
Calib. Ref.: RIX122 Instrument ID : T-042

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 10 | 5 |
| 2,4,6-TRICHLOROPHENOL | ND | 10 | 5 |
| 2,4-DICHLOROPHENOL | ND | 10 | 5 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 5 |
| 2,4-DINITROPHENOL | ND | 20 | 10 |
| 2,4-DINITROTOLUENE | ND | 20 | 10 |
| 2,6-DINITROTOLUENE | ND | 20 | 5 |
| 2-CHLORONAPHTHALENE | ND | 10 | 5 |
| 2-CHLOROPHENOL | ND | 10 | 5 |
| 2-METHYLNAPHTHALENE | ND | 10 | 5 |
| 2-METHYLPHENOL | ND | 10 | 5 |
| 2-NITROANILINE | ND | 20 | 5 |
| 2-NITROPHENOL | ND | 10 | 5 |
| 3,3'-DICHLOROBENZIDINE | ND | 10 | 5 |
| 3-NITROANILINE | ND | 10 | 5 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 20 | 10 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 20 | 5 |
| 4-CHLORO-3-METHYLPHENOL | ND | 10 | 5 |
| 4-CHLOROANILINE | ND | 10 | 5 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 10 | 5 |
| 4-METHYLPHENOL (1) | ND | 10 | 5 |
| 4-NITROANILINE | ND | 10 | 5 |
| 4-NITROPHENOL | ND | 20 | 5 |
| ACENAPHTHENE | ND | 10 | 5 |
| ACENAPHTHYLENE | ND | 10 | 5 |
| ANTHRACENE | ND | 10 | 5 |
| BENZO(A)ANTHRACENE | ND | 10 | 5 |
| BENZO(A)PYRENE | ND | 10 | 5 |
| BENZO(B)FLUORANTHENE | ND | 10 | 5 |
| BENZO(K)FLUORANTHENE | ND | 10 | 5 |
| BENZO(G,H,I)PERYLENE | ND | 10 | 5 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 10 | 5 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 5 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 10 | 5 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 20 | 10 |
| BUTYLBENZYLPHTHALATE | ND | 10 | 5 |
| CHRYSENE | ND | 10 | 5 |
| D1-N-BUTYLPHTHALATE | ND | 10 | 5 |
| D1-N-OCTYLPHTHALATE | ND | 10 | 5 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 5 |
| DIBENZO(FURAN | ND | 10 | 5 |
| D1ETHYLPHTHALATE | ND | 20 | 5 |
| DIMETHYLPHTHALATE | ND | 20 | 5 |
| FLUORANTHENE | ND | 10 | 5 |
| FLUORENE | ND | 10 | 5 |
| HEXACHLOROBENZENE | ND | 20 | 5 |
| HEXACHLOROCYCLOPENTADIENE | ND | 10 | 5 |
| HEXACHLOROETHANE | ND | 10 | 5 |
| INDENO(1,2,3-CD)PYRENE | ND | 10 | 5 |
| ISOPHORONE | ND | 10 | 5 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 10 | 5 |
| N-NITROSODIPHENYLAMINE (2) | ND | 10 | 5 |
| NITROBENZENE | ND | 20 | 10 |
| PENTACHLOROPHENOL | ND | 20 | 5 |
| PHENANTHRENE | ND | 10 | 5 |
| PHENOL | ND | 10 | 5 |
| PYRENE | ND | 10 | 5 |
| 1,1'-BIPHENYL | ND | 10 | 2.5 |
| ACETOPHENONE | ND | 20 | 10 |
| ATRAZINE | ND | 10 | 5 |
| BENZALDEHYDE | ND | 10 | 5 |
| CAROLACTAM | ND | 10 | 5 |
| CARBAZOLE | ND | 10 | 5 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 66 | 25-134 |
| 2-FLUOROBIPHENYL | 62 | 43-125 |
| 2-FLUOROPHENOL | 50 | 25-125 |
| NITROBENZENE-D5 | 58 | 32-125 |
| PHENOL-D5 | 53 | 25-125 |
| TERPHENYL-D14 | 87 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
 SEMI VOLATILE ORGANICS BY GC/MS

| | |
|-------------------------------|--------------------------------|
| Client : YETRA TECH EC, INC. | Date Collected: 10/06/05 |
| Project : MFA, SITE 1, CTO 86 | Date Received: 10/07/05 |
| Batch No. : 05J053 | Date Extracted: 10/11/05 20:00 |
| Sample ID: 86-S1-128 | Date Analyzed: 10/14/05 17:07 |
| Lab Samp ID: J053-10 | Dilution Factor: .95 |
| Lab File ID: RJX082 | Matrix : WATER |
| Ext Btch ID: SVJ009W | % Moisture : NA |
| Calib. Ref.: R1X122 | Instrument ID : T-042 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DICHLOROPHENOL | ND | 9.5 | 4.8 |
| 2,4-DIMETHYLPHENOL | ND | 9.5 | 4.8 |
| 2,4-DINITROPHENOL | ND | 19 | 9.5 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.5 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.7 |
| 2-CHLORONAPHTHALENE | ND | 9.5 | 4.8 |
| 2-CHLOROPHENOL | ND | 9.5 | 4.8 |
| 2-METHYLNAPHTHALENE | ND | 9.5 | 4.8 |
| 2-METHYLPHENOL | ND | 19 | 5.7 |
| 2-NITROANILINE | ND | 9.5 | 4.8 |
| 2-NITROPHENOL | ND | 9.5 | 4.8 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.5 | 4.8 |
| 3-NITROANILINE | ND | 19 | 9.5 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.5 | 4.8 |
| 4-CHLOROANILINE | ND | 9.5 | 4.8 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.5 | 4.8 |
| 4-METHYLPHENOL (1) | ND | 9.5 | 4.8 |
| 4-NITROANILINE | ND | 19 | 4.8 |
| 4-NITROPHENOL | ND | 19 | 4.8 |
| ACENAPHTHENE | ND | 9.5 | 4.8 |
| ACENAPHTHYLENE | ND | 9.5 | 4.8 |
| ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)ANTHRACENE | ND | 9.5 | 4.8 |
| BENZO(A)PYRENE | ND | 9.5 | 4.8 |
| BENZO(B)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(K)FLUORANTHENE | ND | 9.5 | 4.8 |
| BENZO(G,H,I)PERYLENE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.5 | 4.8 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 9.5 | 4.8 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 19 | 9.5 |
| BUTYLBENZYLPHTHALATE | ND | 9.5 | 4.8 |
| CHRYSENE | ND | 9.5 | 4.8 |
| D1-N-BUTYLPHTHALATE | ND | 9.5 | 4.8 |
| D1-N-OCTYLPHTHALATE | ND | 9.5 | 4.8 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.5 | 4.8 |
| DIBENZOFURAN | ND | 9.5 | 4.8 |
| DIBENZOPHTHALATE | ND | 19 | 5.7 |
| DIEETHYLPHTHALATE | ND | 19 | 4.8 |
| DIMETHYLPHTHALATE | ND | 9.5 | 4.8 |
| FLUORANTHENE | ND | 9.5 | 4.8 |
| FLUORENE | ND | 19 | 5.7 |
| HEXACHLOROBENZENE | ND | 9.5 | 4.8 |
| HEXACHLOROCHLOROPENTADIENE | ND | 9.5 | 4.8 |
| HEXACHLOROETHANE | ND | 9.5 | 4.8 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.5 | 4.8 |
| ISOPHORONE | ND | 9.5 | 4.8 |
| N-NITROSO-D1-N-PROPYLAMINE | ND | 9.5 | 4.8 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.5 | 4.8 |
| NITROBENZENE | ND | 19 | 9.5 |
| PENTACHLOROPHENOL | ND | 19 | 5.7 |
| PHENANTHRENE | ND | 9.5 | 4.8 |
| PHENOL | ND | 9.5 | 4.8 |
| PYRENE | ND | 9.5 | 4.8 |
| 1,1'-BIPHENYL | ND | 9.5 | 2.4 |
| ACETOPHENONE | ND | 19 | 9.5 |
| ATRAZINE | ND | 9.5 | 4.8 |
| BENZALDEHYDE | ND | 9.5 | 4.8 |
| CAPROLACTAM | ND | 9.5 | 4.8 |
| CARBAZOLE | ND | 9.5 | 4.8 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 65 | 25-134 |
| 2-FLUOROBIPHENYL | 65 | 43-125 |
| 2-FLUOROPHENOL | 58 | 25-125 |
| NITROBENZENE-D5 | 66 | 32-125 |
| PHENOL-D5 | 59 | 25-125 |
| TERPHENYL-D14 | 83 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/11/05 20:00
Sample ID    : 86-S1-129               Date Analyzed: 10/14/05 21:21
Lab Samp ID  : J053-11                 Dilution Factor: .94
Lab File ID  : RJX092                  Matrix       : WATER
Ext Btch ID  : SVJ009W                 % Moisture   : NA
Calib. Ref.  : R1X122                  Instrument ID : T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4,6-TRICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DICHLOROPHENOL | ND | 9.4 | 4.7 |
| 2,4-DIMETHYLPHENOL | ND | 9.4 | 4.7 |
| 2,4-DINITROPHENOL | ND | 19 | 9.4 |
| 2,4-DINITROTOLUENE | ND | 19 | 9.4 |
| 2,6-DINITROTOLUENE | ND | 19 | 5.6 |
| 2-CHLORONAPHTHALENE | ND | 9.4 | 4.7 |
| 2-CHLOROPHENOL | ND | 9.4 | 4.7 |
| 2-METHYLNAPHTHALENE | ND | 9.4 | 4.7 |
| 2-METHYLPHENOL | ND | 19 | 5.6 |
| 2-NITROANILINE | ND | 9.4 | 4.7 |
| 2-NITROPHENOL | ND | 9.4 | 4.7 |
| 3,3'-DICHLOROBENZIDINE | ND | 9.4 | 4.7 |
| 3-NITROANILINE | ND | 19 | 9.4 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 19 | 6.6 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-CHLORO-3-METHYLPHENOL | ND | 9.4 | 4.7 |
| 4-CHLOROANILINE | ND | 9.4 | 4.7 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 9.4 | 4.7 |
| 4-METHYLPHENOL (1) | ND | 9.4 | 4.7 |
| 4-NITROANILINE | ND | 19 | 4.7 |
| 4-NITROPHENOL | ND | 9.4 | 4.7 |
| ACENAPHTHENE | ND | 9.4 | 4.7 |
| ACENAPHTHYLENE | ND | 9.4 | 4.7 |
| ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)ANTHRACENE | ND | 9.4 | 4.7 |
| BENZO(A)PYRENE | ND | 9.4 | 4.7 |
| BENZO(B)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(K)FLUORANTHENE | ND | 9.4 | 4.7 |
| BENZO(G,H,I)PERYLENE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 9.4 | 4.7 |
| BIS(2-CHLOROETHYL)ETHER | ND | 9.4 | 4.7 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 19 | 9.4 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 9.4 | 4.7 |
| BUTYLBENZYLPHTHALATE | ND | 9.4 | 4.7 |
| CHRYSENE | ND | 9.4 | 4.7 |
| DI-N-BUTYLPHTHALATE | ND | 9.4 | 4.7 |
| DI-N-OCTYLPHTHALATE | ND | 9.4 | 4.7 |
| DIBENZO(A,H)ANTHRACENE | ND | 9.4 | 4.7 |
| DIBENZOFURAN | ND | 19 | 5.6 |
| DIETHYLPHTHALATE | ND | 9.4 | 4.7 |
| DIMETHYLPHTHALATE | ND | 9.4 | 4.7 |
| FLUORANTHENE | ND | 9.4 | 4.7 |
| FLUORENE | ND | 19 | 5.6 |
| HEXACHLOROBENZENE | ND | 9.4 | 4.7 |
| HEXACHLOROCYCLOPENTADIENE | ND | 9.4 | 4.7 |
| HEXACHLOROETHANE | ND | 9.4 | 4.7 |
| INDENO(1,2,3-CD)PYRENE | ND | 9.4 | 4.7 |
| ISOPHORONE | ND | 9.4 | 4.7 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 9.4 | 4.7 |
| N-NITROSODIPHENYLAMINE (2) | ND | 9.4 | 4.7 |
| NITROBENZENE | ND | 19 | 9.4 |
| PENTACHLOROPHENOL | ND | 19 | 5.6 |
| PHENANTHRENE | ND | 9.4 | 4.7 |
| PHENOL | ND | 9.4 | 4.7 |
| PYRENE | ND | 9.4 | 4.7 |
| 1,1'-BIPHENYL | ND | 9.4 | 2.3 |
| ACETOPHENONE | ND | 19 | 9.4 |
| ATRAZINE | ND | 9.4 | 4.7 |
| BENZALDEHYDE | ND | 9.4 | 4.7 |
| CAPROLACTAM | ND | 9.4 | 4.7 |
| CARBAZOLE | ND | 9.4 | 4.7 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 68 | 25-134 |
| 2-FLUOROBIPHENYL | 68 | 43-125 |
| 2-FLUOROPHENOL | 55 | 25-125 |
| NITROBENZENE-D5 | 64 | 32-125 |
| PHENOL-D5 | 58 | 25-125 |
| TERPHENYL-D14 | 87 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520G/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC. Date Collected: 10/06/05
Project : MFA SITE 1, CTO 86 Date Received: 10/07/05
Batch No. : 05J053 Date Extracted: 10/11/05 20:00
Sample ID: 86-S1-130 Date Analyzed: 10/14/05 21:46
Lab Samp ID: J053-12 Dilution Factor: 1.01
Lab File ID: RJX093 Matrix : WATER
Ext Btch ID: SVJ009W % Moisture : NA
Calib. Ref.: RIX122 Instrument ID : T-042

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 10 | 5 |
| 2,4,6-TRICHLOROPHENOL | ND | 10 | 5 |
| 2,4-DICHLOROPHENOL | ND | 10 | 5 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 5 |
| 2,4-DINITROPHENOL | ND | 20 | 10 |
| 2,4-DINITROTOLUENE | ND | 20 | 10 |
| 2,6-DINITROTOLUENE | ND | 20 | 6.1 |
| 2-CHLORONAPHTHALENE | ND | 10 | 5 |
| 2-CHLOROPHENOL | ND | 10 | 5 |
| 2-METHYLNAPHTHALENE | ND | 10 | 5 |
| 2-METHYLPHENOL | ND | 10 | 5 |
| 2-NITROANILINE | ND | 20 | 6.1 |
| 2-NITROPHENOL | ND | 10 | 5 |
| 3,3'-DICHLOROBENZIDINE | ND | 10 | 5 |
| 3-NITROANILINE | ND | 10 | 5 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 20 | 10 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 20 | 7.1 |
| 4-CHLORO-3-METHYLPHENOL | ND | 10 | 5 |
| 4-CHLOROANILINE | ND | 10 | 5 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 10 | 5 |
| 4-METHYLPHENOL (1) | ND | 10 | 5 |
| 4-NITROANILINE | ND | 10 | 5 |
| 4-NITROPHENOL | ND | 20 | 5 |
| ACENAPHTHENE | ND | 10 | 5 |
| ACENAPHTHYLENE | ND | 10 | 5 |
| ANTHRACENE | ND | 10 | 5 |
| BENZO(A)ANTHRACENE | ND | 10 | 5 |
| BENZO(A)PYRENE | ND | 10 | 5 |
| BENZO(B)FLUORANTHENE | ND | 10 | 5 |
| BENZO(K)FLUORANTHENE | ND | 10 | 5 |
| BENZO(G,H,I)PERYLENE | ND | 10 | 5 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 10 | 5 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 5 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 10 | 5 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 20 | 10 |
| BUTYLBENZYLPHTHALATE | ND | 10 | 5 |
| CHRYSENE | ND | 10 | 5 |
| DI-N-BUTYLPHTHALATE | ND | 10 | 5 |
| DI-N-OCTYLPHTHALATE | ND | 10 | 5 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 5 |
| DIBENZOFURAN | ND | 10 | 5 |
| DIETHYLPHTHALATE | ND | 20 | 6.1 |
| DIMETHYLPHTHALATE | ND | 10 | 5 |
| FLUORANTHENE | ND | 10 | 5 |
| FLUORENE | ND | 10 | 5 |
| HEXACHLOROBENZENE | ND | 20 | 6.1 |
| HEXACHLOROCYCLOPENTADIENE | ND | 10 | 5 |
| HEXACHLOROETHANE | ND | 10 | 5 |
| INDENO(1,2,3-CD)PYRENE | ND | 10 | 5 |
| ISOPHORONE | ND | 10 | 5 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 10 | 5 |
| N-NITROSODIPHENYLAMINE (2) | ND | 10 | 5 |
| NITROBENZENE | ND | 10 | 5 |
| PENTACHLOROPHENOL | ND | 20 | 10 |
| PHENANTHRENE | ND | 20 | 6.1 |
| PHENOL | ND | 10 | 5 |
| PYRENE | ND | 10 | 5 |
| 1,1'-BIPHENYL | ND | 10 | 5 |
| ACETOPHENONE | ND | 20 | 2.5 |
| ATRAZINE | ND | 10 | 10 |
| BENZALDEHYDE | ND | 10 | 5 |
| CAPROLACTAM | ND | 10 | 5 |
| CARBAZOLE | ND | 10 | 5 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 73 | 25-134 |
| 2-FLUOROBIPHENYL | 75 | 43-125 |
| 2-FLUOROPHENOL | 67 | 25-125 |
| NITROBENZENE-D5 | 79 | 32-125 |
| PHENOL-D5 | 71 | 25-125 |
| TERPHENYL-D14 | 106 | 42-126 |

RL: Reporting Limit
(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 20:00
Sample ID   : 86-S1-130RE             Date Analyzed: 10/17/05 13:08
Lab Samp ID : J053-12W                Dilution Factor: 2.02
Lab File ID : RJX097                  Matrix      : WATER
Ext Btch ID : SVJ009W                 % Moisture   : NA
Calib. Ref. : R1X122                  Instrument ID : T-042
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|-----------------------------|-------------------|--------------|---------------|
| 2,4,5-TRICHLOROPHENOL | ND | 20 | 10 |
| 2,4,6-TRICHLOROPHENOL | ND | 20 | 10 |
| 2,4-DICHLOROPHENOL | ND | 20 | 10 |
| 2,4-DIMETHYLPHENOL | ND | 20 | 10 |
| 2,4-DINITROPHENOL | ND | 40 | 20 |
| 2,4-DINITROTOLUENE | ND | 40 | 20 |
| 2,6-DINITROTOLUENE | ND | 40 | 12 |
| 2-CHLORONAPHTHALENE | ND | 20 | 10 |
| 2-CHLOROPHENOL | ND | 20 | 10 |
| 2-METHYLNAPHTHALENE | ND | 20 | 10 |
| 2-METHYLPHENOL | ND | 20 | 10 |
| 2-NITROANILINE | ND | 40 | 12 |
| 2-NITROPHENOL | ND | 20 | 10 |
| 3,3'-DICHLOROBENZIDINE | ND | 20 | 10 |
| 3-NITROANILINE | ND | 20 | 10 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 40 | 20 |
| 4-BROMOPHENYL-PHENYL ETHER | ND | 40 | 14 |
| 4-CHLORO-3-METHYLPHENOL | ND | 20 | 10 |
| 4-CHLOROANILINE | ND | 20 | 10 |
| 4-CHLOROPHENYL-PHENYL ETHER | ND | 20 | 10 |
| 4-METHYLPHENOL (1) | ND | 20 | 10 |
| 4-NITROANILINE | ND | 20 | 10 |
| 4-NITROPHENOL | ND | 40 | 10 |
| ACENAPHTHENE | ND | 20 | 10 |
| ACENAPHTHYLENE | ND | 20 | 10 |
| ANTHRACENE | ND | 20 | 10 |
| BENZO(A)ANTHRACENE | ND | 20 | 10 |
| BENZO(A)PYRENE | ND | 20 | 10 |
| BENZO(B)FLUORANTHENE | ND | 20 | 10 |
| BENZO(K)FLUORANTHENE | ND | 20 | 10 |
| BENZO(G,H,I)PERYLENE | ND | 20 | 10 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 20 | 10 |
| BIS(2-CHLOROETHYL)ETHER | ND | 20 | 10 |
| BIS(2-CHLOROISOPROPYL)ETHER | ND | 20 | 10 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 40 | 20 |
| BUTYLBENZYLPHthalate | ND | 20 | 10 |
| CHRYSENE | ND | 20 | 10 |
| DI-N-BUTYLPHthalate | ND | 20 | 10 |
| DI-N-OCTYLPHthalate | ND | 20 | 10 |
| DIBENZO(A,H)ANTHRACENE | ND | 20 | 10 |
| DIBENZOFURAN | ND | 20 | 10 |
| DIDETHYLPHthalate | ND | 40 | 12 |
| DIMETHYLPHthalate | ND | 40 | 10 |
| FLUORANTHENE | ND | 20 | 10 |
| FLUORENE | ND | 20 | 10 |
| HEXACHLOROBENZENE | ND | 40 | 12 |
| HEXACHLOROCYCLOPENTADIENE | ND | 20 | 10 |
| HEXACHLOROETHANE | ND | 20 | 10 |
| INDENO(1,2,3-CD)PYRENE | ND | 20 | 10 |
| ISOPHORONE | ND | 20 | 10 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 20 | 10 |
| N-NITROSDIPHENYLAMINE (2) | ND | 20 | 10 |
| NITROBENZENE | ND | 20 | 10 |
| PENTACHLOROPHENOL | ND | 40 | 20 |
| PHENANTHRENE | ND | 40 | 12 |
| PHENOL | ND | 20 | 10 |
| PYRENE | ND | 20 | 10 |
| 1,1'-BIPHENYL | ND | 20 | 10 |
| ACETOPHENONE | ND | 20 | 5 |
| ATRAZINE | ND | 40 | 20 |
| BENZALDEHYDE | ND | 20 | 10 |
| CAPROLACTAM | ND | 20 | 10 |
| CARBAZOLE | ND | 20 | 10 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| 2,4,6-TRIBROMOPHENOL | 43 | 25-134 |
| 2-FLUOROBIPHENYL | 44 | 43-125 |
| 2-FLUOROPHENOL | 37 | 25-125 |
| NITROBENZENE-D5 | 40 | 32-125 |
| PHENOL-D5 | 39 | 25-125 |
| TERPHENYL-D14 | 55 | 42-126 |

RL: Reporting Limit
 (1): Cannot be separated from 3-Methylphenol
 (2): Cannot be separated from Diphenylamine

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J053

**SW3520C/8081A
PESTICIDES**

Ten (10) water samples were received on 10/07/05 for Pesticides analysis by Method 3520C/8081A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was at five points for Pesticides, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and mean recoveries were within 85-115%.

Endrin and DDT breakdown were within QC limit.

3. Method Blank

Method blank was free of contamination at the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample J053-10 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

When sample results are confirmed by a second column, the relative percentage difference (RPD) between the two results is calculated. If RPD is less than 40%, and no evidence of chromatographic problems, the higher result is reported. If RPD is greater than 40%, the chromatogram is checked for anomalies and results are selected based on the best professional judgement. If no evidence of any chromatographic problems, the higher result is reported.

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTD 86     Date Received: 10/07/05
Batch No.   : 05J053                 Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-131                 Date Analyzed: 10/13/05 22:11
Lab Samp ID: J053-02                 Dilution Factor: .99
Lab File ID: SJ13028A                Matrix       : WATER
Ext Btch ID: CPU007W                 % Moisture    : NA
Calib. Ref.: SJ13019A                Instrument ID : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | .017J (ND) | .05 | .0099 |
| GAMMA-BHC (LINDANE) | (ND) ND | .05 | .0099 |
| BETA-BHC | (ND) ND | .05 | .0099 |
| HEPTACHLOR | 5.1 (ND) | .05 | .0099 |
| DELTA-BHC | (ND) ND | .05 | .0099 |
| ALDRIN | (ND) ND | .05 | .0099 |
| HEPTACHLOR EPOXIDE | (ND) ND | .05 | .0099 |
| GAMMA-CHLORDANE | (ND) ND | .05 | .0099 |
| ALPHA-CHLORDANE | (ND) ND | .05 | .0099 |
| ENDOSULFAN I | (ND) ND | .05 | .03 |
| 4,4'-DDE | (ND) ND | .099 | .03 |
| DIELDRIN | (ND) ND | .2 | .099 |
| ENDRIN | (ND) ND | .099 | .02 |
| 4,4'-DDD | (ND) ND | .099 | .03 |
| ENDOSULFAN II | (ND) ND | .099 | .02 |
| 4,4'-DDT | (ND) ND | .099 | .02 |
| ENDRIN ALDEHYDE | (ND) ND | .099 | .02 |
| ENDOSULFAN SULFATE | (ND) ND | .099 | .02 |
| ENDRIN KETONE | (ND) ND | .099 | .02 |
| METHOXYCHLOR | (ND) ND | .5 | .099 |
| TOXAPHENE | (ND) ND | 3 | 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (107) 65 | 30-130 |
| DECACHLOROBIPHENYL | (98) 98 | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID   : 86-S1-132                Date Analyzed: 10/13/05 22:37
Lab Sample ID: J053-03                 Dilution Factor: .95
Lab File ID : SJ13029A                 Matrix          : WATER
Ext Btch ID : CPJ007W                  % Moisture       : NA
Calib. Ref. : SJ13019A                 Instrument ID    : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .048 | .0095 .0095 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0095 .0095 |
| BETA-BHC | (ND) ND | .048 | .0095 .0095 |
| HEPTACHLOR | .95 (ND) | .048 | .0095 .0095 |
| DELTA-BHC | (ND) ND | .048 | .0095 .0095 |
| ALDRIN | (ND) .011J | .048 | .0095 .0095 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0095 .0095 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0095 .0095 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .0095 .0095 |
| ENDOSULFAN I | (ND) ND | .048 | .028 .028 |
| 4,4'-DDE | (ND) ND | .095 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .095 .095 |
| ENDRIN | (ND) ND | .095 | .019 .019 |
| 4,4'-DDD | (ND) ND | .095 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .095 | .019 .019 |
| 4,4'-DDT | (ND) ND | .095 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .095 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .095 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .095 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .48 | .095 .095 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (73) 68 | 30-130 | |
| DECACHLOROBIPHENYL | (98) 97 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                   Date Extracted: 10/11/05 14:00
Sample ID    : 86-S1-133                Date Analyzed: 10/13/05 23:02
Lab Samp ID  : J053-04                  Dilution Factor: .95
Lab File ID  : SJ13030A                 Matrix          : WATER
Ext Btch ID  : CPJ007W                  % Moisture       : NA
Calib. Ref.  : SJ13019A                 Instrument ID    : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .048 | .0095 |
| GAMMA-BHC (LINDANE) | (ND) ND | .048 | .0095 |
| BETA-BHC | (ND) .012J | .048 | .0095 |
| HEPTACHLOR | .13 (ND) | .048 | .0095 |
| DELTA-BHC | (ND) ND | .048 | .0095 |
| ALDRIN | (ND) .017J | .048 | .0095 |
| HEPTACHLOR EPOXIDE | (ND) ND | .048 | .0095 |
| GAMMA-CHLORDANE | (ND) ND | .048 | .0095 |
| ALPHA-CHLORDANE | (ND) ND | .048 | .0095 |
| ENDOSULFAN I | (ND) ND | .048 | .028 |
| 4,4'-DDE | (ND) ND | .095 | .028 |
| DIELDRIN | (ND) ND | .19 | .095 |
| ENDRIN | (ND) ND | .095 | .019 |
| 4,4'-DDD | (ND) ND | .095 | .028 |
| ENDOSULFAN II | (ND) ND | .095 | .019 |
| 4,4'-DDT | (ND) ND | .095 | .019 |
| ENDRIN ALDEHYDE | (ND) ND | .095 | .019 |
| ENDOSULFAN SULFATE | (ND) ND | .095 | .019 |
| ENDRIN KETONE | (ND) ND | .095 | .019 |
| METHOXYCHLOR | (ND) ND | .48 | .095 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 |
| | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (87) 86 | 30-130 | |
| DECACHLOROBIPHENYL | (98) 98 | 30-130 | |

RL : Reporting limit
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() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                   Date Extracted: 10/11/05 14:00
Sample ID    : 86-S1-134                Date Analyzed: 10/13/05 23:27
Lab Samp ID  : J053-05                  Dilution Factor: .94
Lab File ID  : SJ13031A                 Matrix          : WATER
Ext Btch ID  : CPJ007W                  % Moisture      : NA
Calib. Ref.  : SJ13019A                 Instrument ID   : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) .011J | .047 | .0094 .0094 |
| HEPTACHLOR | .068 (ND) | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) .02J | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | .011J (ND) | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 .028 |
| DIELDRIN | (ND) ND | .19 | .094 .094 |
| ENDRIN | (ND) ND | .094 | .019 .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 1.2 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (70) 69 | 30-130 | |
| DECACHLOROBIPHENYL | (98) 98 | 30-130 | |

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() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86     Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID:   86-S1-135                 Date Analyzed: 10/13/05 23:52
Lab Samp-ID: J053-06                   Dilution Factor: 1
Lab File ID: SJ13032A                  Matrix          : WATER
Ext Btch ID: CPJ007W                   % Moisture       : NA
Calib. Ref.: SJ13019A                  Instrument ID    : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .05 | .01 .01 |
| GAMMA-BHC (LINDANE) | (ND) ND | .05 | .01 .01 |
| BETA-BHC | (ND) ND | .05 | .01 .01 |
| HEPTACHLOR | .54 (ND) | .05 | .01 .01 |
| DELTA-BHC | (ND) ND | .05 | .01 .01 |
| ALDRIN | .026J (ND) | .05 | .01 .01 |
| HEPTACHLOR EPOXIDE | .044J (ND) | .05 | .01 .01 |
| GAMMA-CHLORDANE | (ND) ND | .05 | .01 .01 |
| ALPHA-CHLORDANE | (ND) ND | .05 | .01 .01 |
| ENDOSULFAN I | (ND) ND | .05 | .03 .03 |
| 4,4'-DDE | (ND) ND | .1 | .03 .03 |
| DIELDRIN | (ND) ND | .2 | .1 .1 |
| ENDRIN | (ND) ND | .1 | .02 .02 |
| 4,4'-DDD | (ND) ND | .1 | .03 .03 |
| ENDOSULFAN II | (ND) ND | .1 | .02 .02 |
| 4,4'-DDT | (ND) ND | .1 | .02 .02 |
| ENDRIN ALDEHYDE | (ND) ND | .1 | .02 .02 |
| ENDOSULFAN SULFATE | (ND) ND | .1 | .02 .02 |
| ENDRIN KETONE | (ND) ND | .1 | .02 .02 |
| METHOXYCHLOR | (ND) ND | .5 | .1 .1 |
| TOXAPHENE | (ND) ND | 3 | 1.2 1.2 |
| | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (82) 73 | 30-130 | |
| DECACHLOROBIPHENYL | (96) 95 | 30-130 | |

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() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-136                  Date Analyzed: 10/14/05 02:50
Lab Samp ID: J053-07                  Dilution Factor: .97
Lab File ID: SJ13039A                 Matrix       : WATER
Ext Btch ID: CPJ007W                  % Moisture    : NA
Calib. Ref.: SJ13035A                 Instrument ID : GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .049 | .0097 .0097 |
| GAMMA-BHC (LINDANE) | (ND) ND | .049 | .0097 .0097 |
| BETA-BHC | (ND) .036J | .049 | .0097 .0097 |
| HEPTACHLOR | 1.6 (ND) | .049 | .0097 .0097 |
| DELTA-BHC | (ND) ND | .049 | .0097 .0097 |
| ALDRIN | .014J (ND) | .049 | .0097 .0097 |
| HEPTACHLOR EPOXIDE | (ND) ND | .049 | .0097 .0097 |
| GAMMA-CHLORDANE | (ND) ND | .049 | .0097 .0097 |
| ALPHA-CHLORDANE | (ND) ND | .049 | .0097 .0097 |
| ENDOSULFAN I | (ND) ND | .049 | .029 .029 |
| 4,4'-DDE | (ND) ND | .097 | .029 .029 |
| DIELDRIN | (ND) ND | .19 | .097 .097 |
| ENDRIN | (ND) ND | .097 | .019 .019 |
| 4,4'-DDD | (ND) ND | .097 | .029 .029 |
| ENDOSULFAN II | (ND) ND | .097 | .019 .019 |
| 4,4'-DDT | (ND) ND | .097 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .097 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .097 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .097 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .49 | .097 .097 |
| TOXAPHENE | (ND) ND | 2.9 | 1.2 1.2 |
| | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| ----- | | | |
| TETRACHLORO-M-XYLENE | (76) 71 | 30-130 | |
| DECACHLOROBIPHENYL | (99) 98 | 30-130 | |

RL : Reporting limit
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() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTD 86      Date Received: 10/07/05
Batch No.   : 05J053                   Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-126                   Date Analyzed: 10/14/05 03:15
Lab Samp ID: J053-09                   Dilution Factor: .94
Lab File ID: SJ13040A                  Matrix      : WATER
Ext Btch ID: CPJ007W                   % Moisture   : NA
Calib. Ref.: SJ13035A                  Instrument ID: GCT008
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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 |
| BETA-BHC | (ND) .015J | .047 | .0094 |
| HEPTACHLOR | .035J (ND) | .047 | .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 |
| ALDRIN | .014J (ND) | .047 | .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .0094 |
| ENDOSULFAN I | (ND) ND | .047 | .028 |
| 4,4'-DDE | (ND) ND | .094 | .028 |
| DIELDRIN | (ND) ND | .19 | .094 |
| ENDRIN | (ND) ND | .094 | .019 |
| 4,4'-DDD | (ND) ND | .094 | .028 |
| ENDOSULFAN II | (ND) ND | .094 | .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 |
| ENDRIN KETONE | (ND) ND | .094 | .019 |
| METHOXYCHLOR | (ND) ND | .47 | .094 |
| TOXAPHENE | (ND) ND | 2.8 | 1.2 |
| | | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (85) 81 | 30-130 | |
| DECACHLOROBIPHENYL | (99) 98 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

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=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID   : 86-S1-128                Date Analyzed: 10/14/05 03:40
Lab Samp ID : J053-10                  Dilution Factor: .94
Lab File ID : SJ13041A                 Matrix       : WATER
Ext Btch ID : CPJ007W                  % Moisture    : NA
Calib. Ref. : SJ13035A                 Instrument ID : 6CT008
=====

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| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .047 | .0094 .0094 |
| GAMMA-BHC (LINDANE) | (ND) ND | .047 | .0094 .0094 |
| BETA-BHC | (ND) .015J | .047 | .0094 .0094 |
| HEPTACHLOR | .049 (ND) | .047 | .0094 .0094 |
| DELTA-BHC | (ND) ND | .047 | .0094 .0094 |
| ALDRIN | (ND) ND | .047 | .0094 .0094 |
| HEPTACHLOR EPOXIDE | (ND) ND | .047 | .0094 .0094 |
| GAMMA-CHLORDANE | (ND) ND | .047 | .0094 .0094 |
| ALPHA-CHLORDANE | (ND) ND | .047 | .028 .028 |
| ENDOSULFAN I | (ND) ND | .094 | .028 .028 |
| 4,4'-DDE | (ND) ND | .19 | .094 .094 |
| DIELDRIN | (ND) ND | .094 | .019 .019 |
| ENDRIN | (ND) ND | .094 | .028 .028 |
| 4,4'-DDD | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN II | (ND) ND | .094 | .019 .019 |
| 4,4'-DDT | (ND) ND | .094 | .019 .019 |
| ENDRIN ALDEHYDE | (ND) ND | .094 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .094 | .019 .019 |
| ENDRIN KETONE | (ND) ND | .47 | .094 .094 |
| METHOXYCHLOR | (ND) ND | 2.8 | 1.2 1.2 |
| TOXAPHENE | (ND) ND | | |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (68) 68 | 30-130 | |
| DECACHLOROBIPHENYL | (96) 96 | 30-130 | |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID   : 86-S1-129               Date Analyzed: 10/14/05 05:47
Lab Samp ID : J053-11                 Dilution Factor: .97
Lab File ID : SJ13046A                Matrix          : WATER
Ext Btch ID : CPJ007W                 % Moisture       : NA
Calib. Ref. : SJ13035A                Instrument ID    : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .049 | .0097 |
| GAMMA-BHC (LINDANE) | (ND) ND | .049 | .0097 |
| BETA-BHC | (ND) .017J | .049 | .0097 |
| HEPTACHLOR | (.02J) .011J | .049 | .0097 |
| DELTA-BHC | (ND) ND | .049 | .0097 |
| ALDRIN | (ND) ND | .049 | .0097 |
| HEPTACHLOR EPOXIDE | (ND) ND | .049 | .0097 |
| GAMMA-CHLORDANE | (ND) ND | .049 | .0097 |
| ALPHA-CHLORDANE | (ND) ND | .049 | .0097 |
| ENDOSULFAN I | (ND) ND | .049 | .029 |
| 4,4'-DDE | (ND) ND | .097 | .029 |
| DIELDRIN | (ND) ND | .19 | .097 |
| ENDRIN | (ND) ND | .097 | .019 |
| 4,4'-DDD | (ND) ND | .097 | .029 |
| ENDOSULFAN II | (ND) ND | .097 | .019 |
| 4,4'-DDT | (ND) ND | .097 | .019 |
| ENDRIN ALDEHYDE | (ND) ND | .097 | .019 |
| ENDOSULFAN SULFATE | (ND) ND | .097 | .019 |
| ENDRIN KETONE | (ND) ND | .097 | .019 |
| METHOXYCHLOR | (ND) ND | .49 | .097 |
| TOXAPHENE | (ND) ND | 2.9 | 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | 70 (72) | 30-130 |
| DECACHLOROBIPHENYL | (96) 95 | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

SW3520C/8081A
PESTICIDES

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-130                  Date Analyzed: 10/14/05 06:12
Lab Samp ID: J053-12                  Dilution Factor: .97
Lab File ID: SJ13047A                 Matrix          : WATER
Ext Btch ID: CPJ007W                  % Moisture       : NA
Calib. Ref.: SJ13035A                 Instrument ID    : GC1008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---------------------|-------------------|--------------|---------------|
| ALPHA-BHC | (ND) ND | .049 | .0097 .0097 |
| GAMMA-BHC (LINDANE) | (ND) ND | .049 | .0097 .0097 |
| BETA-BHC | .13 (.25) | .049 | .0097 .0097 |
| HEPTACHLOR | 2.8 (ND) | .049 | .0097 .0097 |
| DELTA-BHC | .012J (ND) | .049 | .0097 .0097 |
| ALDRIN | .073 (ND) | .049 | .0097 .0097 |
| HEPTACHLOR EPOXIDE | (ND) ND | .049 | .0097 .0097 |
| GAMMA-CHLORDANE | (ND) ND | .049 | .0097 .0097 |
| ALPHA-CHLORDANE | (ND) ND | .049 | .0097 .0097 |
| ENDOSULFAN I | (ND) .055 | .049 | .029 .029 |
| 4,4'-DDE | .066J (ND) | .097 | .029 .029 |
| DIELDRIN | (ND) ND | .19 | .097 .097 |
| ENDRIN | .032J (ND) | .097 | .019 .019 |
| 4,4'-DDD | .036J (ND) | .097 | .029 .029 |
| ENDOSULFAN II | .023J (ND) | .097 | .019 .019 |
| 4,4'-DDT | .029J (ND) | .097 | .019 .019 |
| ENDRIN ALDENYDE | (ND) ND | .097 | .019 .019 |
| ENDOSULFAN SULFATE | (ND) ND | .097 | .019 .019 |
| ENDRIN KETONE | .031J (.032J) | .097 | .019 .019 |
| METHOXYCHLOR | (ND) ND | .49 | .097 .097 |
| TOXAPHENE | (ND) ND | 2.9 | 1.2 1.2 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (76) 67 | 30-130 |
| DECACHLOROBIPHENYL | (86) 74 | 30-130 |

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
() included the reported column

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J053

SW3520C/8082
PCBs

Ten (10) water samples were received on 10/07/05 for PCBs analysis by Method 3520C/8082 in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. **Holding Time**
Analytical holding time was met.
2. **Instrument Performance and Calibration**
Initial calibration was five points for PCB-1016 and PCB-1260, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and all recoveries were within 85-115%.
3. **Method Blank**
Method blank was free of contamination at the reporting limit.
4. **Surrogate Recovery**
Recoveries were within QC limit.
5. **Lab Control Sample/Lab Control Sample Duplicate**
All recoveries were within QC limits.
6. **Matrix Spike/Matrix Spike Duplicate**
Sample J053-10 was spiked. All recoveries were within QC limit.
7. **Sample Analysis**
Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW3520C/8082
PCBs

```

=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID:   86-S1-131                 Date Analyzed: 10/13/05 22:11
Lab Samp ID: J053-02                  Dilution Factor: .99
Lab File ID: SJ13028A                 Matrix          : WATER
Ext Btch ID: CPJ007W                  % Moisture       : NA
Calib. Ref.: SJ13022A                 Instrument ID    : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .99 | .25 .25 |
| PCB-1221 | (ND) ND | .99 | .25 .25 |
| PCB-1232 | (ND) ND | .99 | .25 .25 |
| PCB-1242 | (ND) ND | .99 | .25 .25 |
| PCB-1248 | (ND) ND | .99 | .25 .25 |
| PCB-1254 | (ND) ND | .99 | .25 .25 |
| PCB-1260 | (ND) ND | .99 | .25 .25 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (73) 63 | 30-130 |
| DECAHCHLOROBIPHENYL | (94) 92 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CYO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-132                  Date Analyzed: 10/13/05 22:37
Lab Samp ID: J053-03                  Dilution Factor: .95
Lab File ID: SJ13029A                 Matrix      : WATER
Ext Btch ID: CPJ007W                  % Moisture   : NA
Calib. Ref.: SJ13022A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .95 | .24 .24 |
| PCB-1221 | (ND) ND | .95 | .24 .24 |
| PCB-1232 | (ND) ND | .95 | .24 .24 |
| PCB-1242 | (ND) ND | .95 | .24 .24 |
| PCB-1248 | (ND) ND | .95 | .24 .24 |
| PCB-1254 | (ND) ND | .95 | .24 .24 |
| PCB-1260 | (ND) ND | .95 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (64) 62 | 30-130 |
| DECACHLOROBIPHENYL | (93) 92 | 30-130 |

RL: Reporting Limit
Left of | is related to first column ; Right of | related to second column
() included the reported column
* Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO B6      Date Received: 10/07/05
Batch No.    : 05J053                   Date Extracted: 10/11/05 14:00
Sample ID    : 86-S1-133                 Date Analyzed: 10/13/05 23:02
Lab Samp ID  : J053-04                   Dilution Factor: .95
Lab File ID  : SJ13030A                  Matrix          : WATER
Ext Btch ID  : CPJ007W                   % Moisture       : NA
Calib. Ref.  : SJ13022A                  Instrument ID    : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .95 | .24 .24 |
| PCB-1221 | (ND) ND | .95 | .24 .24 |
| PCB-1232 | (ND) ND | .95 | .24 .24 |
| PCB-1242 | (ND) ND | .95 | .24 .24 |
| PCB-1248 | (ND) ND | .95 | .24 .24 |
| PCB-1254 | (ND) ND | .95 | .24 .24 |
| PCB-1260 | (ND) ND | .95 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (73) 76 | 30-130 |
| DECACHLOROBIPHENYL | (93) 93 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO B6      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-134                  Date Analyzed: 10/13/05 23:27
Lab Samp ID: J053-05                  Dilution Factor: .94
Lab File ID: SJ13031A                  Matrix      : WATER
Ext Btch ID: CPJ007W                  % Moisture   : NA
Calib. Ref.: SJ13022A                  Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (61) 63 | 30-130 | |
| DECACHLOROBIPHENYL | (94) 93 | 30-130 | |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID: 86-S1-135                  Date Analyzed: 10/13/05 23:52
Lab Samp ID: J053-06                   Dilution Factor: 1
Lab File ID: SJ13032A                  Matrix      : WATER
Ext Btch ID: CPJ007W                   % Moisture   : NA
Calib. Ref.: SJ13022A                  Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | 1 | .25 .25 |
| PCB-1221 | (ND) ND | 1 | .25 .25 |
| PCB-1232 | (ND) ND | 1 | .25 .25 |
| PCB-1242 | (ND) ND | 1 | .25 .25 |
| PCB-1248 | (ND) ND | 1 | .25 .25 |
| PCB-1254 | (ND) ND | 1 | .25 .25 |
| PCB-1260 | (ND) ND | 1 | .25 .25 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (73) 68 | 30-130 |
| DECACHLOROBIPHENYL | (91) 90 | 30-130 |

RL: Reporting Limit

Left of | is related to first column ; Right of | related to second column

() included the reported column

* Out side of QC Limit

SW3520C/8082
PCBs

```
=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID   : 86-S1-136                Date Analyzed: 10/14/05 02:50
Lab Samp ID : J053-07                  Dilution Factor: .97
Lab File ID : SJ13039A                 Matrix       : WATER
Ext Btch ID : CPJ007W                  % Moisture    : NA
Calib. Ref. : SJ13038A                 Instrument ID : GCT008
=====
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .97 | .24 .24 |
| PCB-1221 | (ND) ND | .97 | .24 .24 |
| PCB-1232 | (ND) ND | .97 | .24 .24 |
| PCB-1242 | (ND) ND | .97 | .24 .24 |
| PCB-1248 | (ND) ND | .97 | .24 .24 |
| PCB-1254 | (ND) ND | .97 | .24 .24 |
| PCB-1260 | (ND) ND | .97 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (68) 67 | 30-130 |
| DECAHCHLOROBIPHENYL | (94) 92 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID:  B6-S1-126                  Date Analyzed: 10/14/05 03:15
Lab Samp ID: J053-09                    Dilution Factor: .94
Lab File ID: SJ13040A                  Matrix      : WATER
Ext Btch ID: CPJ007W                   % Moisture   : NA
Calib. Ref.: SJ13038A                  Instrument ID : GCT008
=====
  
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (75) 75 | 30-130 | |
| DECACHLOROBIPHENYL | (93) 93 | 30-130 | |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520G/8082
PCBs

```

=====
Client      : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project     : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.   : 05J053                  Date Extracted: 10/11/05 14:00
Sample ID   : 86-S1-128                Date Analyzed: 10/14/05 03:40
Lab Samp ID : J053-10                  Dilution Factor: .94
Lab File ID : SJ13041A                 Matrix       : WATER
Ext Btch ID : CPJ007W                  % Moisture    : NA
Calib. Ref. : SJ13038A                 Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|----------------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .94 | .24 .24 |
| PCB-1221 | (ND) ND | .94 | .24 .24 |
| PCB-1232 | (ND) ND | .94 | .24 .24 |
| PCB-1242 | (ND) ND | .94 | .24 .24 |
| PCB-1248 | (ND) ND | .94 | .24 .24 |
| PCB-1254 | (ND) ND | .94 | .24 .24 |
| PCB-1260 | (ND) ND | .94 | .24 .24 |
| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT | |
| TETRACHLORO-M-XYLENE | (59) 61 | 30-130 | |
| DECACHLOROBIPHENYL | (91) 91 | 30-130 | |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```

=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                   Date Extracted: 10/11/05 14:00
Sample ID:   86-S1-129                   Date Analyzed: 10/14/05 05:47
Lab Samp ID: J053-11                     Dilution Factor: .97
Lab File ID: SJ13046A                     Matrix       : WATER
Ext Btch ID: CPJ007W                      % Moisture    : NA
Calib. Ref.: SJ13038A                     Instrument ID : GCT008
=====

```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .97 | .24 .24 |
| PCB-1221 | (ND) ND | .97 | .24 .24 |
| PCB-1232 | (ND) ND | .97 | .24 .24 |
| PCB-1242 | (ND) ND | .97 | .24 .24 |
| PCB-1248 | (ND) ND | .97 | .24 .24 |
| PCB-1254 | (ND) ND | .97 | .24 .24 |
| PCB-1260 | (ND) ND | .97 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (63) 67 | 30-130 |
| DECACHLOROBIPHENYL | (91) 90 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

SW3520C/8082
PCBs

```
=====
Client       : TETRA TECH EC, INC.      Date Collected: 10/06/05
Project      : MFA, SITE 1, CTO 86      Date Received: 10/07/05
Batch No.    : 05J053                   Date Extracted: 10/11/05 14:00
Sample ID:   86-S1-130                  Date Analyzed: 10/14/05 06:12
Lab Samp ID: J053-12                    Dilution Factor: .97
Lab File ID: SJ13047A                   Matrix          : WATER
Ext Btch ID: CPJ007W                     % Moisture       : NA
Calib. Ref.: SJ13038A                    Instrument ID    : GGT008
=====
```

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|------------|-------------------|--------------|---------------|
| PCB-1016 | (ND) ND | .97 | .24 .24 |
| PCB-1221 | (ND) ND | .97 | .24 .24 |
| PCB-1232 | (ND) ND | .97 | .24 .24 |
| PCB-1242 | (ND) ND | .97 | .24 .24 |
| PCB-1248 | (ND) ND | .97 | .24 .24 |
| PCB-1254 | (ND) ND | .97 | .24 .24 |
| PCB-1260 | (ND) ND | .97 | .24 .24 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|----------------------|------------|----------|
| TETRACHLORO-M-XYLENE | (67) 76 | 30-130 |
| DECACHLOROBIPHENYL | (82) 91 | 30-130 |

RL: Reporting Limit
 Left of | is related to first column ; Right of | related to second column
 () included the reported column
 * Out side of QC Limit

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.
PROJECT: MFA, SITE 1, CTO 86
SDG: 05J053

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Ten (10) water samples were received on 10/07/05 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. Holding Time

Analysis met holding time criteria.

2. Method Blank

Method blank was free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limit.

4. Serial Dilution / Post-Analytical Spike

Sample J053-10 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

Sample J053-10 was spiked. MS recovery was within QC limit but was out of the limit in MSD.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

Samples were initially analyzed at DF 20 due to matrix interference of high salt level.

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : TETRA TECH EC, INC.
Project : MFA, SITE 1, CTO 86
Batch No. : 05J053

Matrix : WATER
Instrument ID : T1047

| SAMPLE ID | EMAX SAMPLE ID | RESULTS (ug/L) | DLF | MOIST | RL (ug/L) | MDL (ug/L) | Analysis DATE/TIME | Extraction DATE/TIME | LFID | CAL REF | PREP BATCH | Collection DATE/TIME | Received DATE/TIME |
|--------------|-------------------|-------------------|-----|-------|--------------|---------------|-----------------------|-------------------------|------------|------------|------------|-------------------------|-----------------------|
| MBLK1W | HGJ013WB | ND | 1 | NA | .2 | .1 | 10/13/0514:11 | 10/13/0511:00 | M47J012010 | M47J012008 | HGJ013W | NA | 10/13/05 |
| LCS1W | HGJ013WL | 4.99 | 1 | NA | .2 | .1 | 10/13/0514:13 | 10/13/0511:00 | M47J012011 | M47J012008 | HGJ013W | NA | 10/13/05 |
| LCD1W | HGJ013WC | 5 | 1 | NA | .2 | .1 | 10/13/0514:15 | 10/13/0511:00 | M47J012012 | M47J012008 | HGJ013W | NA | 10/13/05 |
| 86-S1-128AS | J053-10A | 38.6 | 20 | NA | 4 | 2 | 10/13/0515:15 | 10/13/0511:00 | M47J012039 | M47J012032 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-128 | J053-10 | ND | 20 | NA | 4 | 2 | 10/13/0515:17 | 10/13/0511:00 | M47J012040 | M47J012032 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-128B1 | J053-10J | ND | 100 | NA | 20 | 10 | 10/13/0515:19 | 10/13/0511:00 | M47J012041 | M47J012032 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-128MS | J053-10M | 3.84J | 20 | NA | 4 | 2 | 10/13/0515:21 | 10/13/0511:00 | M47J012042 | M47J012032 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-128MSD | J053-10S | 3.34J | 20 | NA | 4 | 2 | 10/13/0515:23 | 10/13/0511:00 | M47J012043 | M47J012032 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-131 | J053-02 | ND | 20 | NA | 4 | 2 | 10/13/0515:29 | 10/13/0511:00 | M47J012046 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-132 | J053-03 | ND | 20 | NA | 4 | 2 | 10/13/0515:31 | 10/13/0511:00 | M47J012047 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-133 | J053-04 | ND | 20 | NA | 4 | 2 | 10/13/0515:34 | 10/13/0511:00 | M47J012048 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-134 | J053-05 | ND | 20 | NA | 4 | 2 | 10/13/0515:36 | 10/13/0511:00 | M47J012049 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-135 | J053-06 | ND | 20 | NA | 4 | 2 | 10/13/0515:38 | 10/13/0511:00 | M47J012050 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-136 | J053-07 | ND | 20 | NA | 4 | 2 | 10/13/0515:40 | 10/13/0511:00 | M47J012051 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-126 | J053-09 | ND | 20 | NA | 4 | 2 | 10/13/0515:42 | 10/13/0511:00 | M47J012052 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-129 | J053-11 | ND | 20 | NA | 4 | 2 | 10/13/0515:44 | 10/13/0511:00 | M47J012053 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |
| 86-S1-130 | J053-12 | ND | 20 | NA | 4 | 2 | 10/13/0515:46 | 10/13/0511:00 | M47J012054 | M47J012044 | HGJ013W | 10/06/05 | 10/07/05 |

RL: Reporting Limit

7003

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Emax Laboratories, Incorporated
Project: Moffett
Sample Matrix: Water

Service Request No.: K0504756
Date Received: 10/12/2005

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Twelve water samples were received for analysis at Columbia Analytical Services on 10/12/2005. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Dissolved Metals

Matrix Spike Recovery Exceptions:

The matrix spike recoveries of Beryllium (59%), Cobalt (59%), Copper (74%), Lead (70%), and Thallium (72%) for Batch QC sample were outside the project specified control limits of 75-125%. All the recoveries were within the CAS statistically derived limits for the reductive precipitation procedure. Based on the CAS statistical control limits, the recoveries observed are in the range expected for this procedure. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

Approved by _____

Date _____

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/04/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-124

Lab Code: K0504756-001 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.376 | B | |
| Arsenic | 200.8 | 0.56 | 0.01 | 1 | 11/19/05 | 11/22/05 | 1.61 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 107 | | |
| Beryllium | 200.8 | 0.0222 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0073 | B | N |
| Cadmium | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.407 | | |
| Chromium | 200.8 | 0.22 | 0.03 | 1 | 11/19/05 | 11/22/05 | 0.44 | | |
| Cobalt | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 7.690 | | N |
| Copper | 200.8 | 0.111 | 0.006 | 1 | 11/19/05 | 11/22/05 | 2.640 | | N |
| Lead | 200.8 | 0.022 | 0.009 | 1 | 11/19/05 | 11/22/05 | 0.131 | | N |
| Nickel | 200.8 | 0.22 | 0.02 | 1 | 11/19/05 | 11/22/05 | 16.3 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.093 | | |
| Thallium | 200.8 | 0.0222 | 0.0006 | 1 | 11/19/05 | 11/22/05 | 0.0403 | | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 13.7 | B | |
| Zinc | 200.8 | 0.56 | 0.02 | 1 | 11/19/05 | 11/22/05 | 20.1 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/04/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-125

Lab Code: K0504756-002 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | B | |
| Arsenic | 200.8 | 1.11 | 0.02 | 2 | 11/19/05 | 11/22/05 | 4.47 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 176 | | |
| Beryllium | 200.8 | 0.0222 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0108 | B | N |
| Cadmium | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Chromium | 200.8 | 0.44 | 0.07 | 2 | 11/19/05 | 11/22/05 | 0.84 | | |
| Cobalt | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 3.320 | | N |
| Copper | 200.8 | 0.222 | 0.011 | 2 | 11/19/05 | 11/22/05 | 0.100 | B | N |
| Lead | 200.8 | 0.044 | 0.018 | 2 | 11/19/05 | 11/22/05 | 0.022 | B | N |
| Nickel | 200.8 | 0.44 | 0.04 | 2 | 11/19/05 | 11/22/05 | 6.46 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Thallium | 200.8 | 0.0444 | 0.0011 | 2 | 11/19/05 | 11/22/05 | 0.0011 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 12.1 | B | |
| Zinc | 200.8 | 1.11 | 0.04 | 2 | 11/19/05 | 11/22/05 | 0.64 | B | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated
Project No.: NA
Project Name: Moffett
Matrix: WATER

Service Request: K0504756
Date Collected: 10/06/05
Date Received: 10/12/05
Units: µG/L
Basis: NA

Sample Name: 86-S1-131

Lab Code: K0504756-003 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 1.000 | 0.100 | 1 | 10/22/05 | 11/2/05 | 0.244 | B | |
| Arsenic | 200.8 | 0.56 | 0.01 | 1 | 11/19/05 | 11/22/05 | 0.95 | | |
| Barium | 200.8 | 1.00 | 0.12 | 1 | 10/22/05 | 11/2/05 | 576 | | |
| Beryllium | 200.8 | 0.0222 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0042 | B | N |
| Cadmium | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | |
| Chromium | 200.8 | 0.22 | 0.03 | 1 | 11/19/05 | 11/22/05 | 0.56 | | |
| Cobalt | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 1.730 | | N |
| Copper | 200.8 | 0.111 | 0.006 | 1 | 11/19/05 | 11/22/05 | 0.031 | B | N |
| Lead | 200.8 | 0.022 | 0.009 | 1 | 11/19/05 | 11/22/05 | 0.009 | U | N |
| Nickel | 200.8 | 0.22 | 0.02 | 1 | 11/19/05 | 11/22/05 | 4.69 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | |
| Thallium | 200.8 | 0.0222 | 0.0006 | 1 | 11/19/05 | 11/22/05 | 0.0014 | B | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 9.8 | B | |
| Zinc | 200.8 | 0.56 | 0.02 | 1 | 11/19/05 | 11/22/05 | 1.84 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Project No.: NA

Project Name: Moffett

Matrix: WATER

Service Request: K0504756

Date Collected: 10/06/05

Date Received: 10/12/05

Units: µG/L

Basis: NA

Sample Name: 86-S1-132

Lab Code: K0504756-004 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 1.000 | 0.100 | 1 | 10/22/05 | 11/2/05 | 0.236 | B | |
| Arsenic | 200.8 | 0.56 | 0.01 | 1 | 11/19/05 | 11/22/05 | 1.95 | | |
| Barium | 200.8 | 1.00 | 0.12 | 1 | 10/22/05 | 11/2/05 | 556 | | |
| Beryllium | 200.8 | 0.0222 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0046 | B | N |
| Cadmium | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | |
| Chromium | 200.8 | 0.22 | 0.03 | 1 | 11/19/05 | 11/22/05 | 0.59 | | |
| Cobalt | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 2.990 | | N |
| Copper | 200.8 | 0.111 | 0.006 | 1 | 11/19/05 | 11/22/05 | 0.060 | B | N |
| Lead | 200.8 | 0.022 | 0.009 | 1 | 11/19/05 | 11/22/05 | 0.009 | U | N |
| Nickel | 200.8 | 0.22 | 0.02 | 1 | 11/19/05 | 11/22/05 | 4.80 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.022 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | |
| Thallium | 200.8 | 0.0222 | 0.0006 | 1 | 11/19/05 | 11/22/05 | 0.0011 | B | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 10.3 | B | |
| Zinc | 200.8 | 0.56 | 0.02 | 1 | 11/19/05 | 11/22/05 | 2.25 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/06/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-133

Lab Code: K0504756-005 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | U | |
| Arsenic | 200.8 | 1.05 | 0.02 | 2 | 11/19/05 | 11/22/05 | 3.86 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 150 | | |
| Beryllium | 200.8 | 0.0421 | 0.0013 | 2 | 11/19/05 | 11/22/05 | 0.0072 | B | N |
| Cadmium | 200.8 | 0.042 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Chromium | 200.8 | 0.42 | 0.06 | 2 | 11/19/05 | 11/22/05 | 0.61 | | |
| Cobalt | 200.8 | 0.042 | 0.004 | 2 | 11/19/05 | 11/22/05 | 2.270 | | N |
| Copper | 200.8 | 0.211 | 0.011 | 2 | 11/19/05 | 11/22/05 | 0.099 | B | N |
| Lead | 200.8 | 0.042 | 0.017 | 2 | 11/19/05 | 11/22/05 | 0.017 | U | N |
| Nickel | 200.8 | 0.42 | 0.04 | 2 | 11/19/05 | 11/22/05 | 5.45 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.042 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Thallium | 200.8 | 0.0421 | 0.0011 | 2 | 11/19/05 | 11/22/05 | 0.0011 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 7.3 | B | |
| Zinc | 200.8 | 1.05 | 0.04 | 2 | 11/19/05 | 11/22/05 | 31.3 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/06/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-134

Lab Code: K0504756-006 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | U | |
| Arsenic | 200.8 | 1.11 | 0.02 | 2 | 11/19/05 | 11/22/05 | 4.33 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 150 | | |
| Beryllium | 200.8 | 0.0444 | 0.0013 | 2 | 11/19/05 | 11/22/05 | 0.0079 | B | N |
| Cadmium | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Chromium | 200.8 | 0.44 | 0.07 | 2 | 11/19/05 | 11/22/05 | 0.50 | | |
| Cobalt | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 2.280 | | N |
| Copper | 200.8 | 0.222 | 0.011 | 2 | 11/19/05 | 11/22/05 | 0.093 | B | N |
| Lead | 200.8 | 0.044 | 0.018 | 2 | 11/19/05 | 11/22/05 | 0.026 | B | N |
| Nickel | 200.8 | 0.44 | 0.04 | 2 | 11/19/05 | 11/22/05 | 5.46 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Thallium | 200.8 | 0.0444 | 0.0011 | 2 | 11/19/05 | 11/22/05 | 0.0011 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 10.6 | B | |
| Zinc | 200.8 | 1.11 | 0.04 | 2 | 11/19/05 | 11/22/05 | 20.6 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/06/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-135

Lab Code: K0504756-007 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 45.2 | B | |
| Antimony | 200.8 | 1.000 | 0.100 | 1 | 10/22/05 | 11/2/05 | 0.306 | B | |
| Arsenic | 200.8 | 2.22 | 0.04 | 2 | 11/19/05 | 11/22/05 | 7.25 | | |
| Barium | 200.8 | 1.00 | 0.12 | 1 | 10/22/05 | 11/2/05 | 398 | | |
| Beryllium | 200.8 | 0.0444 | 0.0013 | 1 | 11/19/05 | 11/22/05 | 0.0242 | B | N |
| Cadmium | 200.8 | 0.089 | 0.009 | 2 | 11/19/05 | 11/22/05 | 0.009 | U | |
| Chromium | 200.8 | 0.89 | 0.13 | 2 | 11/19/05 | 11/22/05 | 2.51 | | |
| Cobalt | 200.8 | 0.089 | 0.009 | 2 | 11/19/05 | 11/22/05 | 2.870 | | N |
| Copper | 200.8 | 0.444 | 0.022 | 2 | 11/19/05 | 11/22/05 | 0.140 | B | N |
| Lead | 200.8 | 0.089 | 0.036 | 2 | 11/19/05 | 11/22/05 | 0.072 | B | N |
| Nickel | 200.8 | 0.89 | 0.09 | 2 | 11/19/05 | 11/22/05 | 9.48 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.089 | 0.009 | 2 | 11/19/05 | 11/22/05 | 0.009 | U | |
| Thallium | 200.8 | 0.0889 | 0.0022 | 2 | 11/19/05 | 11/22/05 | 0.0022 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 16.6 | B | |
| Zinc | 200.8 | 2.22 | 0.09 | 2 | 11/19/05 | 11/22/05 | 0.82 | B | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated
 Project No.: NA
 Project Name: Moffett
 Matrix: WATER

Service Request: K0504756
 Date Collected: 10/06/05
 Date Received: 10/12/05
 Units: µG/L
 Basis: NA

Sample Name: 86-S1-136

Lab Code: K0504756-008 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | U | |
| Arsenic | 200.8 | 2.22 | 0.04 | 2 | 11/19/05 | 11/22/05 | 7.72 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 458 | | |
| Beryllium | 200.8 | 0.0889 | 0.0027 | 2 | 11/19/05 | 11/22/05 | 0.0294 | B | N |
| Cadmium | 200.8 | 0.089 | 0.009 | 2 | 11/19/05 | 11/22/05 | 0.009 | U | |
| Chromium | 200.8 | 0.89 | 0.13 | 2 | 11/19/05 | 11/22/05 | 0.92 | | |
| Cobalt | 200.8 | 0.089 | 0.009 | 2 | 11/19/05 | 11/22/05 | 7.280 | | N |
| Copper | 200.8 | 0.444 | 0.022 | 2 | 11/19/05 | 11/22/05 | 0.125 | B | N |
| Lead | 200.8 | 0.089 | 0.036 | 2 | 11/19/05 | 11/22/05 | 0.041 | B | N |
| Nickel | 200.8 | 0.89 | 0.09 | 2 | 11/19/05 | 11/22/05 | 12.5 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.089 | 0.009 | 2 | 11/19/05 | 11/22/05 | 0.009 | U | |
| Thallium | 200.8 | 0.0889 | 0.0022 | 2 | 11/19/05 | 11/22/05 | 0.0022 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 15.1 | B | |
| Zinc | 200.8 | 2.22 | 0.09 | 2 | 11/19/05 | 11/22/05 | 0.74 | B | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/06/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µG/L

Basis: NA

Sample Name: 86-S1-126

Lab Code: K0504756-009 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | U | |
| Arsenic | 200.8 | 1.18 | 0.02 | 2 | 11/19/05 | 11/22/05 | 2.97 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 99.9 | | |
| Beryllium | 200.8 | 0.0235 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0065 | B | N |
| Cadmium | 200.8 | 0.047 | 0.005 | 2 | 11/19/05 | 11/22/05 | 0.473 | | |
| Chromium | 200.8 | 0.47 | 0.07 | 2 | 11/19/05 | 11/22/05 | 0.35 | B | |
| Cobalt | 200.8 | 0.047 | 0.005 | 2 | 11/19/05 | 11/22/05 | 9.690 | | N |
| Copper | 200.8 | 0.235 | 0.012 | 2 | 11/19/05 | 11/22/05 | 0.494 | | N |
| Lead | 200.8 | 0.047 | 0.019 | 2 | 11/19/05 | 11/22/05 | 0.036 | B | N |
| Nickel | 200.8 | 0.47 | 0.05 | 2 | 11/19/05 | 11/22/05 | 14.5 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.047 | 0.005 | 2 | 11/19/05 | 11/22/05 | 0.005 | U | |
| Thallium | 200.8 | 0.0471 | 0.0012 | 2 | 11/19/05 | 11/22/05 | 0.0517 | | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 11.6 | B | |
| Zinc | 200.8 | 1.18 | 0.05 | 2 | 11/19/05 | 11/22/05 | 17.4 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated

Service Request: K0504756

Project No.: NA

Date Collected: 10/06/05

Project Name: Moffett

Date Received: 10/12/05

Matrix: WATER

Units: µg/L

Basis: NA

Sample Name: 86-S1-128

Lab Code: K0504756-010 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | U | |
| Arsenic | 200.8 | 1.25 | 0.03 | 2 | 11/19/05 | 11/22/05 | 5.28 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 159 | | |
| Beryllium | 200.8 | 0.0250 | 0.0008 | 1 | 11/19/05 | 11/22/05 | 0.0102 | B | N |
| Cadmium | 200.8 | 0.050 | 0.005 | 2 | 11/19/05 | 11/22/05 | 0.005 | U | |
| Chromium | 200.8 | 0.50 | 0.08 | 2 | 11/19/05 | 11/22/05 | 0.44 | B | |
| Cobalt | 200.8 | 0.050 | 0.005 | 2 | 11/19/05 | 11/22/05 | 8.340 | | N |
| Copper | 200.8 | 0.250 | 0.013 | 2 | 11/19/05 | 11/22/05 | 0.075 | B | N |
| Lead | 200.8 | 0.050 | 0.020 | 2 | 11/19/05 | 11/22/05 | 0.020 | U | N |
| Nickel | 200.8 | 0.50 | 0.05 | 2 | 11/19/05 | 11/22/05 | 10.3 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.050 | 0.005 | 2 | 11/19/05 | 11/22/05 | 0.005 | U | |
| Thallium | 200.8 | 0.0500 | 0.0013 | 2 | 11/19/05 | 11/22/05 | 0.0031 | B | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 13.0 | B | |
| Zinc | 200.8 | 1.25 | 0.05 | 2 | 11/19/05 | 11/22/05 | 1.09 | B | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated
 Project No.: NA
 Project Name: Moffett
 Matrix: WATER

Service Request: K0504756
 Date Collected: 10/06/05
 Date Received: 10/12/05
 Units: µg/L
 Basis: NA

Sample Name: 86-S1-129

Lab Code: K0504756-011 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 2.000 | 0.200 | 2 | 10/22/05 | 11/2/05 | 0.200 | U | |
| Arsenic | 200.8 | 1.11 | 0.02 | 2 | 11/19/05 | 11/22/05 | 2.53 | | |
| Barium | 200.8 | 2.00 | 0.24 | 2 | 10/22/05 | 11/2/05 | 72.0 | | |
| Beryllium | 200.8 | 0.0222 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0054 | B | N |
| Cadmium | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.742 | | |
| Chromium | 200.8 | 0.44 | 0.07 | 2 | 11/19/05 | 11/22/05 | 0.36 | B | |
| Cobalt | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 5.250 | | N |
| Copper | 200.8 | 0.222 | 0.011 | 2 | 11/19/05 | 11/22/05 | 0.205 | B | N |
| Lead | 200.8 | 0.044 | 0.018 | 2 | 11/19/05 | 11/22/05 | 0.018 | U | N |
| Nickel | 200.8 | 0.44 | 0.04 | 2 | 11/19/05 | 11/22/05 | 10.1 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Thallium | 200.8 | 0.0444 | 0.0011 | 2 | 11/19/05 | 11/22/05 | 0.0380 | B | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 14.7 | B | |
| Zinc | 200.8 | 1.11 | 0.04 | 2 | 11/19/05 | 11/22/05 | 44.3 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated
 Project No.: NA
 Project Name: Moffett
 Matrix: WATER

Service Request: K0504756
 Date Collected: 10/06/05
 Date Received: 10/12/05
 Units: µG/L
 Basis: NA

Sample Name: 86-S1-130

Lab Code: K0504756-012 DISS

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 50.3 | | |
| Antimony | 200.8 | 1.000 | 0.100 | 1 | 10/22/05 | 11/2/05 | 0.484 | B | |
| Arsenic | 200.8 | 1.11 | 0.02 | 2 | 11/19/05 | 11/22/05 | 1.93 | | |
| Barium | 200.8 | 1.00 | 0.12 | 1 | 10/22/05 | 11/2/05 | 1260 | | |
| Beryllium | 200.8 | 0.0222 | 0.0007 | 1 | 11/19/05 | 11/22/05 | 0.0169 | B | N |
| Cadmium | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Chromium | 200.8 | 0.44 | 0.07 | 2 | 11/19/05 | 11/22/05 | 7.41 | | |
| Cobalt | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.360 | | N |
| Copper | 200.8 | 0.222 | 0.011 | 2 | 11/19/05 | 11/22/05 | 0.135 | B | N |
| Lead | 200.8 | 0.044 | 0.018 | 2 | 11/19/05 | 11/22/05 | 0.019 | B | N |
| Nickel | 200.8 | 0.44 | 0.04 | 2 | 11/19/05 | 11/22/05 | 61.6 | | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.044 | 0.004 | 2 | 11/19/05 | 11/22/05 | 0.004 | U | |
| Thallium | 200.8 | 0.0444 | 0.0011 | 2 | 11/19/05 | 11/22/05 | 0.0011 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 14.6 | B | |
| Zinc | 200.8 | 1.11 | 0.04 | 2 | 11/19/05 | 11/22/05 | 20.2 | | |

% Solids: 0.0

Comments: Dissolved Metals

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Emax Laboratories, Incorporated
 Project No.: NA
 Project Name: Moffett
 Matrix: WATER

Service Request: K0504756

Date Collected:

Date Received:

Units: µg/L

Basis: NA

Sample Name: Method Blank

Lab Code: K0504756-MB

| Analyte | Analysis Method | MRL | MDL | Dil. | Date Extracted | Date Analyzed | Result | C | Q |
|-----------|-----------------|--------|--------|------|----------------|---------------|--------|---|---|
| Aluminum | 6010B | 50 | 40 | 1 | 10/26/05 | 11/2/05 | 40 | U | |
| Antimony | 200.8 | 1.000 | 0.100 | 1 | 10/22/05 | 11/2/05 | 0.100 | U | |
| Arsenic | 200.8 | 0.50 | 0.01 | 1 | 11/19/05 | 11/22/05 | 0.01 | U | |
| Barium | 200.8 | 1.00 | 0.12 | 1 | 10/22/05 | 11/2/05 | 1.57 | | |
| Beryllium | 200.8 | 0.0200 | 0.0006 | 1 | 11/19/05 | 11/22/05 | 0.0006 | U | N |
| Cadmium | 200.8 | 0.020 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | |
| Chromium | 200.8 | 0.20 | 0.03 | 1 | 11/19/05 | 11/22/05 | 0.03 | U | |
| Cobalt | 200.8 | 0.020 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | N |
| Copper | 200.8 | 0.100 | 0.005 | 1 | 11/19/05 | 11/22/05 | 0.005 | U | N |
| Lead | 200.8 | 0.020 | 0.008 | 1 | 11/19/05 | 11/22/05 | 0.008 | U | N |
| Nickel | 200.8 | 0.020 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.02 | U | |
| Selenium | 7742 | 1.0 | 0.3 | 2 | 10/26/05 | 11/22/05 | 0.3 | U | |
| Silver | 200.8 | 0.020 | 0.002 | 1 | 11/19/05 | 11/22/05 | 0.002 | U | |
| Thallium | 200.8 | 0.0200 | 0.0005 | 1 | 11/19/05 | 11/22/05 | 0.0005 | U | N |
| Vanadium | 6010B | 20.0 | 7.0 | 1 | 10/26/05 | 11/2/05 | 7.0 | U | |
| Zinc | 200.8 | 0.50 | 0.02 | 1 | 11/19/05 | 11/22/05 | 0.02 | U | |

% Solids: 0.0

Comments:

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Moffett Air Field, Site 1, CTO 86

Collection Date: October 6, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J053

Sample Identification

86-S1-139
86-S1-131
86-S1-132**
86-S1-133
86-S1-134**
86-S1-135
86-S1-136
86-S1-138
86-S1-126
86-S1-128
86-S1-129
86-S1-130
86-S1-128MS
86-S1-128MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

All samples were received in good condition with the following exceptions:

| Sample | Compound | Finding | Criteria | Flag | A or P |
|--|-------------------|---|--|---|--------|
| 86-S1-132** 86-S1-133 86-S1-126 86-S1-128 | All TCL compounds | Air bubbles were apparent in the sample containers. | There should be no air bubbles in the sample containers. | J (all detects) UJ (all non-detects) | A |

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---------|-----------------------|--|---|--|--------|
| 9/21/05 | Acetone 2-Butanone | 0.043 (≥ 0.05) 0.040 (≥ 0.05) | 86-S1-136 ✓ 86-S1-138 ✓ 86-S1-128 ✓ 86-S1-128 ✓ 86-S1-129 ✓ 86-S1-130 ✓ 86-S1-128MS 86-S1-128MSD MBLK1W | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A |

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|----------|--|--|--|---|--------|
| 10/19/05 | Chloroethane Trichlorofluoromethane Carbon disulfide 2,2-Dichloropropane n-Butylbenzene Hexachlorobutadiene | 27.1 41.9 26.3 42.6 25.6 28.0 | 86-S1-139 ✓ 86-S1-131 ✓ 86-S1-132** ✓ 86-S1-133 ✓ 86-S1-134** ✓ 86-S1-135 ✓ MBLK2W | J (all detects) UJ (all non-detects) | A |

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|----------|---------------------------|--|---|--|--------|
| 10/16/05 | Acetone 2-Butanone | 0.035 (≥ 0.05) 0.044 (≥ 0.05) | 86-S1-136 ✓ 86-S1-138 ✓ 86-S1-126 ✓ 86-S1-128 ✓ 86-S1-129 ✓ 86-S1-130 ✓ 86-S1-128MS 86-S1-128MSD MBLK1W | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A |

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 86-S1-131 and 86-S1-132** and samples 86-S1-133 and 86-S1-134** were identified as field duplicates. No volatiles were detected in any of the samples.

XVII. Field Blanks

Samples 86-S1-139 and 86-S1-138 were identified as trip blanks. No volatile contaminants were found in these blanks.

Moffett Air Field, Site 1, CTO 86
Volatiles - Data Qualification Summary - SDG 05J053

| SDG | Sample | Compound | Flag | A or P | Reason |
|--------|--|--|--|--------|------------------------------|
| 04J053 | 86-S1-132** 86-S1-133 86-S1-126 86-S1-128 | All TCL compounds | J (all detects) UJ (all non-detects) | A | Sample condition |
| 04J053 | 86-S1-136 86-S1-138 86-S1-126 86-S1-128 86-S1-129 86-S1-130 | Acetone 2-Butanone | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A | Initial calibration (RRF) |
| 04J053 | 86-S1-139 86-S1-131 86-S1-132** 86-S1-133 86-S1-134** 86-S1-135 | Chloroethane Trichlorofluoromethane Carbon disulfide 2,2-Dichloropropane n-Butylbenzene Hexachlorobutadiene | J (all detects) UJ (all non-detects) | A | Continuing calibration (%D) |
| 04J053 | 86-S1-136 86-S1-138 86-S1-126 86-S1-128 86-S1-129 86-S1-130 | Acetone 2-Butanone | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A | Continuing calibration (RRF) |

Moffett Air Field, Site 1, CTO 86
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Air Field, Site 1, CTO 86

Collection Date: October 6, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Semivolatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J053

Sample Identification

86-S1-131
86-S1-132**
86-S1-133
86-S1-134**
86-S1-135
86-S1-136
86-S1-126
86-S1-128
86-S1-129
86-S1-130
86-S1-130RE
86-S1-128MS
86-S1-128MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 13 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|----------|---|------------------------------|---|--|--------|
| 10/14/05 | Bis(2-chloroisopropyl)ether 2,4-Dinitrophenol 4-Nitrophenol Benzo(k)fluoranthene | 34.9 33.8 25.5 33.6 | 86-S1-131 ✓ 86-S1-132** ✓ 86-S1-133 ✓ 86-S1-134** ✓ 86-S1-135 ✓ 86-S1-136 ✓ 86-S1-126 ✓ 86-S1-128 ✓ 86-S1-129 ✓ 86-S1-130 ✓ 86-S1-128MS 86-S1-128MSD MBLK1W | J (all detects) UJ (all non-detects) | A |
| 10/17/05 | Bis(2-chloroisopropyl)ether Benzo(k)fluoranthene | 33.1 27.5 | 86-S1-130RE | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A |

All of the continuing calibration RRF values were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

| Sample | Internal Standards | Area (Limits) | Compound | Flag | A or P |
|-------------|--------------------|------------------------|--|---|--------|
| 86-S1-130RE | Perylene-d12 | 145405 (182354-729416) | Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | J (all detects) UJ (all non-detects) | A |

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 86-S1-131 and 86-S1-132** and samples 86-S1-133 and 86-S1-134** were identified as field duplicates. No semivolatiles were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86
Semivolatiles - Data Qualification Summary - SDG 05J053

| SDG | Sample | Compound | Flag | A or P | Reason |
|--------|--|--|--|--------|-----------------------------|
| 04J053 | 86-S1-131 86-S1-132** 86-S1-133 86-S1-134** 86-S1-135 86-S1-136 86-S1-126 86-S1-128 86-S1-129 86-S1-130 | Bis(2-chloroisopropyl)ether 2,4-Dinitrophenol 4-Nitrophenol Benzo(k)fluoranthene | J (all detects) UJ (all non-detects) | A | Continuing calibration (%D) |
| 04J053 | 86-S1-130RE | Bis(2-chloroisopropyl)ether Benzo(k)fluoranthene | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A | Continuing calibration (%D) |
| 04J053 | 86-S1-130RE | Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | J (all detects) UJ (all non-detects) | A | Internal standards (area) |

Moffett Air Field, Site 1, CTO 86
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Moffett Airfield, Site 1, CTO 86

Collection Date: October 6, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Chlorinated Pesticides

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J053

Sample Identification

86-S1-131

86-S1-132**

86-S1-133

86-S1-134**

86-S1-135

86-S1-136

86-S1-126

86-S1-128

86-S1-129

86-S1-130

86-S1-128MS

86-S1-128MSD

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

The individual 4,4'-DDT and Endrin breakdowns were less than 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples 86-S1-131 and 86-S1-132** and samples 86-S1-133 and 86-S1-134** were identified as field duplicates. No chlorinated pesticides were detected in any of the samples.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86
Chlorinated Pesticides - Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Moffett Airfield, Site 1, CTO 86

Collection Date: October 6, 2005

LDC Report Date: November 17, 2005

Matrix: Water

Parameters: Polychlorinated Biphenyls

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J053

Sample Identification

86-S1-131
86-S1-132**
86-S1-133
86-S1-134**
86-S1-135
86-S1-136
86-S1-126
86-S1-128
86-S1-129
86-S1-130
86-S1-128MS
86-S1-128MSD

**Indicates sample underwent EPA Level IV review.

Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance data were not provided and therefore not reviewed.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples 86-S1-131 and 86-S1-132** and samples 86-S1-133 and 86-S1-134** were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples.

XV. Field Blanks

No field blanks were identified in this SDG.

Moffett Airfield, Site 1, CTO 86

Polychlorinated Biphenyls - Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

Moffett Airfield, Site 1, CTO 86

Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Moffett Air Field, Site 1, CTO 86

Collection Date: November 6, 2005

LDC Report Date: November 14, 2005

Matrix: Water

Parameters: Dissolved Mercury

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05J053

Sample Identification

86-S1-131
86-S1-132**
86-S1-133
86-S1-134**
86-S1-135
86-S1-136
86-S1-126
86-S1-128
86-S1-129
86-S1-130
86-S1-128MS
86-S1-128MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 7470A for Dissolved Mercury.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

ICP was not utilized in this SDG.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|--|-------------------|---------------------|----------------------|-----------------|---|--------|
| 86-S1-128MS/MSD (All samples in SDG 05J053) | Dissolved mercury | - | 67 (75-125) | - | J (all detects) UJ (all non-detects) | A |

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XI. Sample Result Verification

All sample result verifications were acceptable for samples on which a NFESC Level IV review was performed. Raw data were not evaluated for samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIII. Field Duplicates

Samples 86-S1-131 and 86-S1-132** and samples 86-S1-133 and 86-S1-134** were identified as field duplicates. No metals were detected in any of the samples.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86
Dissolved Mercury - Data Qualification Summary - SDG 05J053

| SDG | Sample | Analyte | Flag | A or P | Reason |
|--------|--|-------------------|---|--------|--|
| 05J053 | 86-S1-131 86-S1-132** 86-S1-133 86-S1-134** 86-S1-135 86-S1-136 86-S1-126 86-S1-128 86-S1-129 86-S1-130 | Dissolved mercury | J (all detects) UJ (all non-detects) | A | Matrix spike/Matrix spike duplicates (%R) |

Moffett Air Field, Site 1, CTO 86
Dissolved Mercury - Laboratory Blank Data Qualification Summary - SDG 05J053

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Moffett Air Field, Site 1, CTO 86
Collection Date: October 4 through October 6, 2005
LDC Report Date: December 5, 2005
Matrix: Water
Parameters: Dissolved Metals
Validation Level: EPA Level III & IV
Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K0504756

Sample Identification

86-S1-124
86-S1-125
86-S1-131
86-S1-132**
86-S1-133
86-S1-134**
86-S1-135
86-S1-136
86-S1-126
86-S1-128
86-S1-129
86-S1-130
86-S1-124MS
86-S1-124DUP
86-S1-128MS
86-S1-128DUP

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 16 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B and 7742, and EPA Method 200.8 for Dissolved Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met with the following exceptions:

| Date | Lab. Reference/ID | Analyte | %R (Limits) | Associated Samples | Flag | A or P |
|----------|-------------------|-----------|--------------|--------------------|-----------------|--------|
| 10/22/05 | CCV2 | Beryllium | 113 (90-110) | PB | J (all detects) | P |

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|-----------------|--|--|-----------------------------|
| PB (prep blank) | Barium | 1.57 ug/L | All samples in SDG K0504756 |
| ICB/CCB | Antimony Arsenic Beryllium Selenium Thallium | 0.029 ug/L 0.011 ug/L 0.0221 ug/L 0.3 ug/L 0.08 ug/L | All samples in SDG K0504756 |

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|-----------|---|--|---|
| 86-S1-124 | Antimony Beryllium (0.11X) Thallium (0.11X) | 0.376 ug/L 0.0073 ug/L 0.0403 ug/L | 0.376U ug/L 0.0073U ug/L 0.0403U ug/L |

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|-------------|---|--|---|
| 86-S1-125 | Antimony Beryllium (0.11x) | 0.200 ug/L 0.0108 ug/L | 0.200U ug/L 0.0108U ug/L |
| 86-S1-131 | Antimony Beryllium (0.11x) Thallium (0.11x) | 0.244 ug/L 0.0042 ug/L 0.0014 ug/L | 0.244U ug/L 0.0042U ug/L 0.0014U ug/L |
| 86-S1-132** | Antimony Beryllium (0.11x) Thallium (0.11x) | 0.236 ug/L 0.0046 ug/L 0.0011 ug/L | 0.236U ug/L 0.0046U ug/L 0.0011U ug/L |
| 86-S1-133 | Beryllium (0.21x) | 0.0072 ug/L | 0.0072U ug/L |
| 86-S1-134** | Beryllium (0.22x) | 0.0079 ug/L | 0.0079U ug/L |
| 86-S1-135 | Antimony Beryllium (0.22x) | 0.306 ug/L 0.0242 ug/L | 0.306U ug/L 0.0242U ug/L |
| 86-S1-136 | Beryllium (0.44x) | 0.0294 ug/L | 0.0294U ug/L |
| 86-S1-126 | Beryllium (0.12x) Thallium (0.24x) | 0.0065 ug/L 0.0517 ug/L | 0.0065U ug/L 0.0517U ug/L |
| 86-S1-128 | Beryllium (0.125x) Thallium (0.25x) | 0.0102 ug/L 0.0031 ug/L | 0.0102U ug/L 0.0031U ug/L |
| 86-S1-129 | Beryllium (0.11x) Thallium (0.22x) | 0.0054 ug/L 0.0380 ug/L | 0.0054U ug/L 0.0380U ug/L |
| 86-S1-130 | Antimony | 0.484 ug/L | 0.484U ug/L |

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Internal Standards

All internal standard percent recoveries (%R) were within QC limits with the following exceptions:

| Date | Sample | Internal Standard | %R (Limits) | Analyte | Flag | A or P |
|----------|-------------|--|--|--|--|--------|
| 11/2/05 | 86-S1-132** | Indium ¹¹⁵ Lutetium ¹⁷⁵ | 170.7 (60-125) 149.5 (60-125) | Antimony Barium | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A |
| 11/2/05 | 86-S1-134** | Indium ¹¹⁵ Lutetium ¹⁷⁵ | 132.6 (60-125) 149.1 (60-125) | Antimony Barium | J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects) | A |
| 11/22/05 | 86-S1-132** | Scandium ⁴⁵ Nickel ⁶¹ Indium ¹¹⁵ Lutetium ¹⁷⁵ | 136.1 (60-125) 192.4 (60-125) 157.6 (60-125) 125.8 (60-125) | Arsenic Cadmium Chromium Cobalt Copper Lead Nickel Silver Thallium Zinc | J (all detects) UJ (all non-detects) | A |
| 11/22/05 | 86-S1-134** | Nickel ⁶¹ Indium ¹¹⁵ | 188.7 (60-125) 150.8 (60-125) | Nickel Arsenic Cadmium Chromium Cobalt Copper Silver Zinc | J (all detects) UJ (all non-detects) | A |
| 11/22/05 | 86-S1-132** | Scandium ⁴⁵ | 145.1 (60-125) | Beryllium | J (all detects) UJ (all non-detects) | A |
| 11/22/05 | 86-S1-134** | Scandium ⁴⁵ | 161.3 (60-125) | Beryllium | J (all detects) UJ (all non-detects) | A |

IX. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

All sample result verifications were acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIII. Field Duplicates

Samples 86-S1-131 and 86-S1-132** and samples 86-S1-133 and 86-S1-134** were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

| Analyte | Concentration (mg/Kg) | | RPD |
|-----------|-----------------------|-------------|-----|
| | 86-S1-131 | 86-S1-132** | |
| Antimony | 0.244 | 0.236 | 3 |
| Arsenic | 0.95 | 1.95 | 69 |
| Barium | 576 | 556 | 4 |
| Beryllium | 0.0042 | 0.0046 | 9 |
| Chromium | 0.56 | 0.59 | 5 |
| Cobalt | 1.730 | 2.990 | 53 |
| Copper | 0.031 | 0.060 | 64 |
| Nickel | 4.69 | 4.80 | 2 |
| Thallium | 0.0014 | 0.0011 | 24 |

| Analyte | Concentration (mg/Kg) | | RPD |
|----------|-----------------------|-------------|-----|
| | 86-S1-131 | 86-S1-132** | |
| Vanadium | 9.8 | 10.3 | 5 |
| Zinc | 1.84 | 2.25 | 20 |

| Analyte | Concentration (mg/Kg) | | RPD |
|-----------|-----------------------|-------------|----------------|
| | 86-S1-133 | 86-S1-134** | |
| Arsenic | 3.86 | 4.33 | 11 |
| Barium | 150 | 150 | 0 |
| Beryllium | 0.0072 | 0.0079 | 9 |
| Chromium | 0.61 | 0.50 | 20 |
| Cobalt | 2.270 | 2.280 | 0 |
| Copper | 0.099 | 0.093 | 6 |
| Lead | 0.017U | 0.026 | Not calculable |
| Nickel | 5.45 | 5.46 | 0 |
| Vanadium | 7.3 | 10.6 | 37 |
| Zinc | 31.3 | 20.6 | 41 |

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, Site 1, CTO 86
Dissolved Metals - Data Qualification Summary - SDG K0504756

| SDG | Sample | Analyte | Flag | A or P | Reason |
|----------|-------------|---|---|--------|-------------------------|
| K0504756 | 86-S1-132** | Antimony Barium Arsenic Cadmium Chromium Cobalt Copper Lead Nickel Silver Thallium Zinc Beryllium | J (all detects) UJ (all non-detects) | A | Internal standards (%R) |
| K0504756 | 86-S1-134** | Antimony Barium Nickel Arsenic Cadmium Chromium Cobalt Copper Silver Zinc Beryllium | J (all detects) UJ (all non-detects) | A | Internal standards (%R) |

Moffett Air Field, Site 1, CTO 86
Dissolved Metals - Laboratory Blank Data Qualification Summary - SDG K0504756

| SDG | Sample | Analyte | Modified Final Concentration | A or P |
|----------|-------------|---|---|--------|
| K0504756 | 86-S1-124 | Antimony Beryllium (0.11x) Thallium (0.11x) | 0.376U ug/L 0.0073U ug/L 0.0403U ug/L | A |
| K0504756 | 86-S1-125 | Antimony Beryllium (0.11x) | 0.200U ug/L 0.0108U ug/L | A |
| K0504756 | 86-S1-131 | Antimony Beryllium (0.11x) Thallium (0.11x) | 0.244U ug/L 0.0042U ug/L 0.0014U ug/L | A |
| K0504756 | 86-S1-132** | Antimony Beryllium (0.11x) Thallium (0.11x) | 0.236U ug/L 0.0046U ug/L 0.0011U ug/L | A |
| K0504756 | 86-S1-133 | Beryllium (0.21x) | 0.0072U ug/L | A |

| SDG | Sample | Analyte | Modified Final Concentration | A or P |
|----------|-------------|--|------------------------------|--------|
| K0504756 | 86-S1-134** | Beryllium (0.22x) | 0.0079U ug/L | A |
| K0504756 | 86-S1-135 | Antimony Beryllium (0.22x) | 0.306U ug/L 0.0242U ug/L | A |
| K0504756 | 86-S1-136 | Beryllium (0.44x) | 0.0294U ug/L | A |
| K0504756 | 86-S1-126 | Beryllium (0.12x) Thallium (0.24x) | 0.0065U ug/L 0.0517U ug/L | A |
| K0504756 | 86-S1-128 | Beryllium (0.125x) Thallium (0.25x) | 0.0102U ug/L 0.0031U ug/L | A |
| K0504756 | 86-S1-129 | Beryllium (0.11x) Thallium (0.22x) | 0.0054U ug/L 0.0360U ug/L | A |
| K0504756 | 86-S1-130 | Antimony | 0.484U ug/L | A |

APPENDIX D

GROUNDWATER HYDROGRAPHS

FIGURE D-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPHS, WELLS W1-1 AND W1-1R**

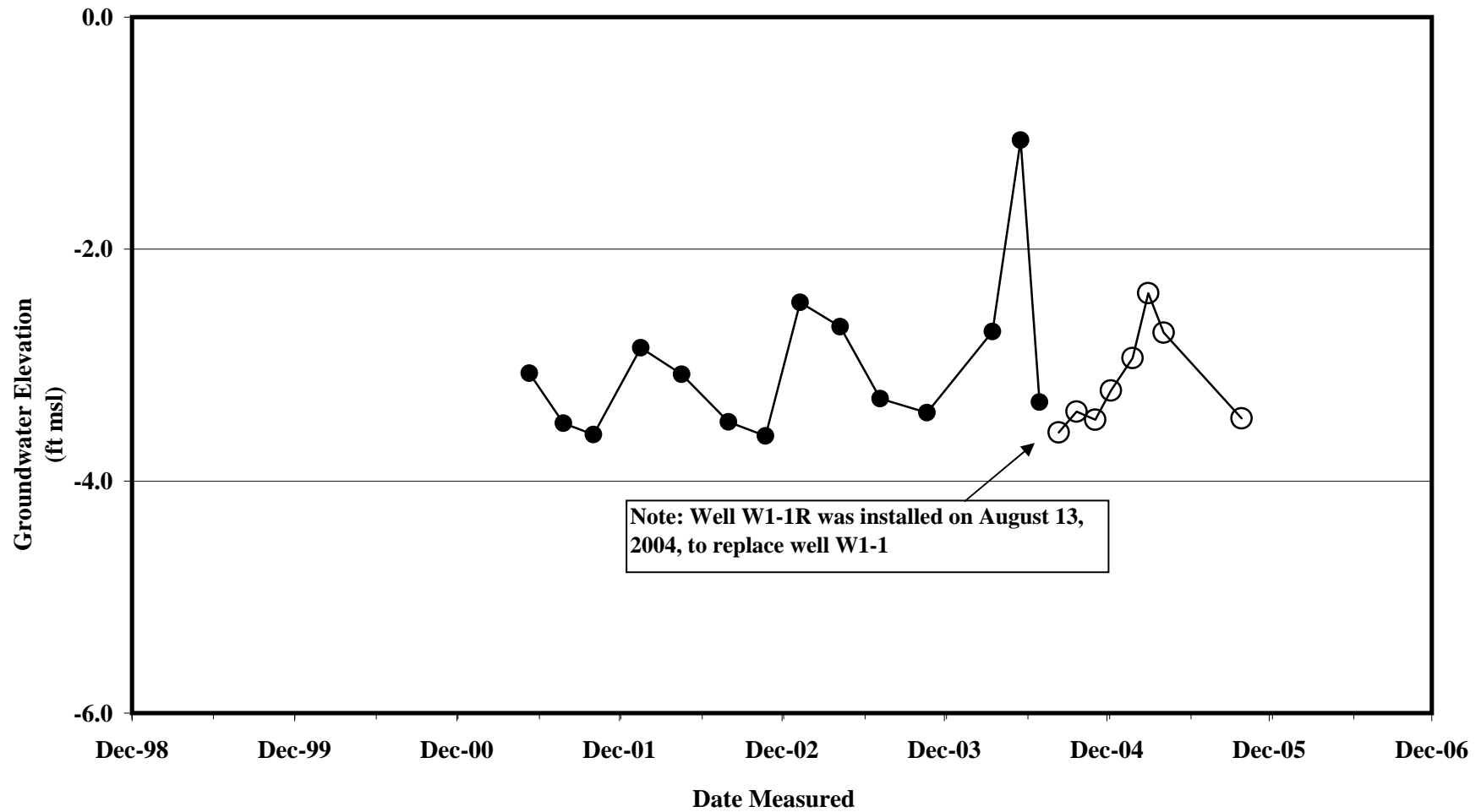


FIGURE D-2

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-5**

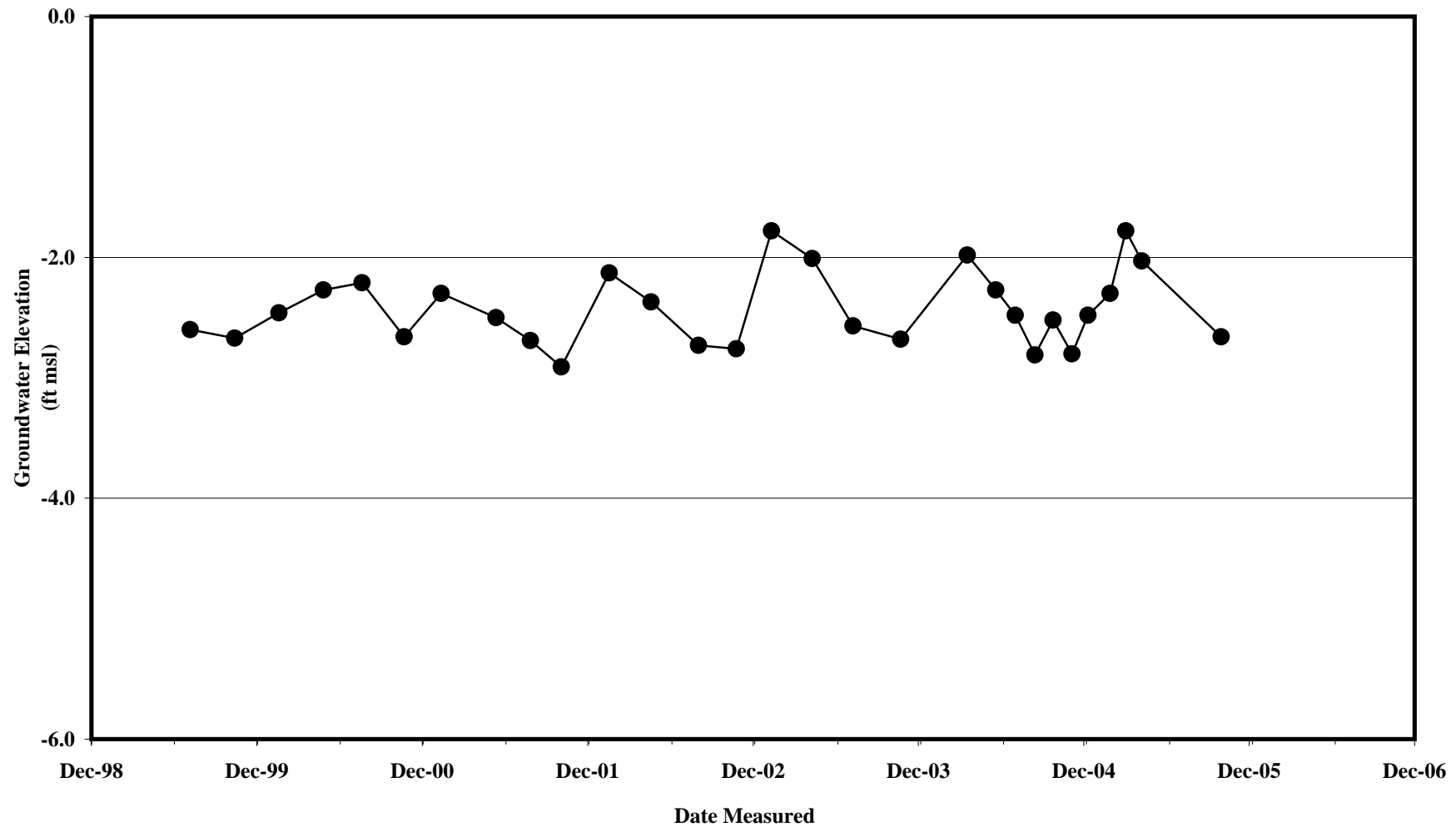


FIGURE D-3

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-6**

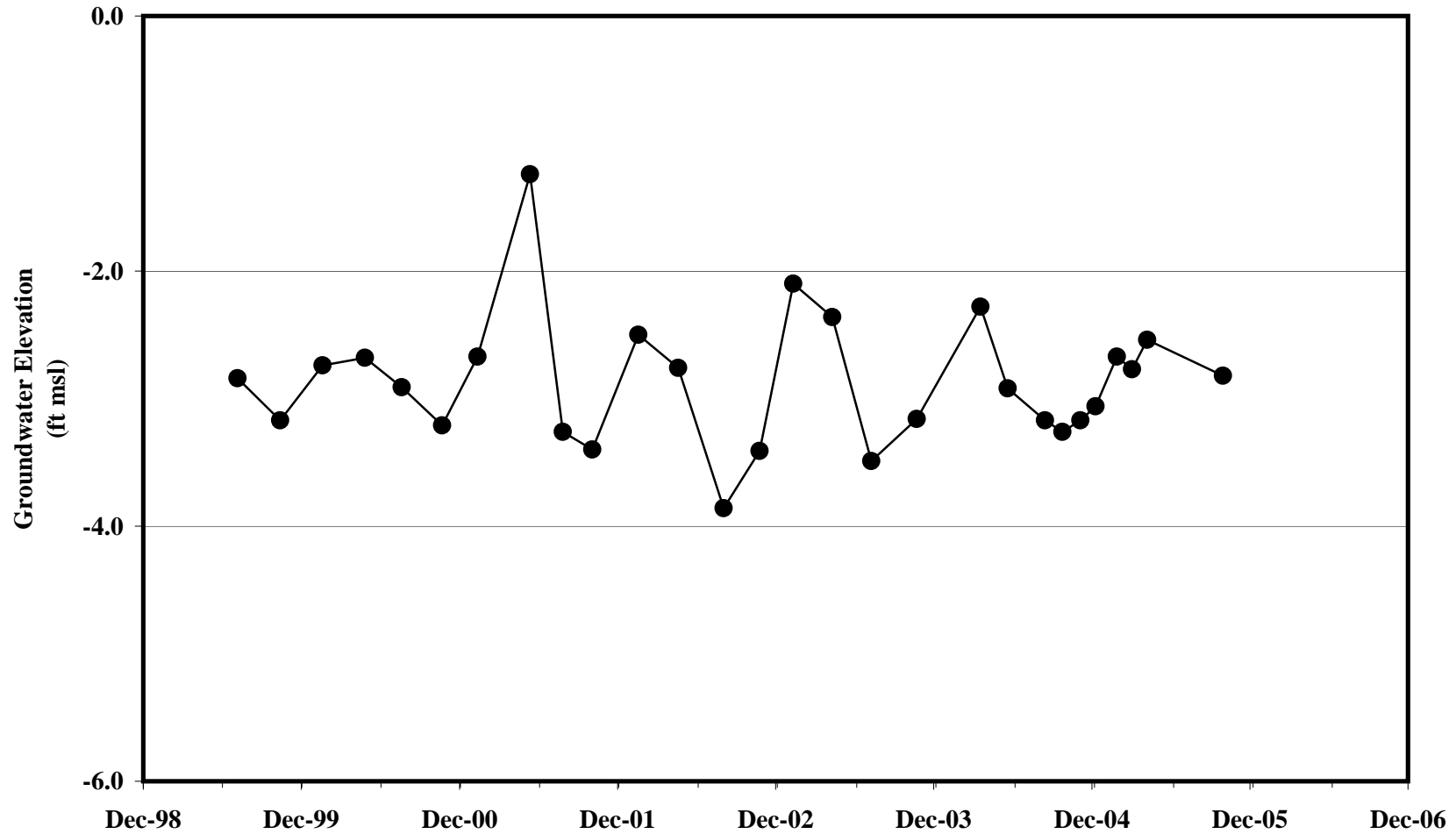


FIGURE D-4

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-7**

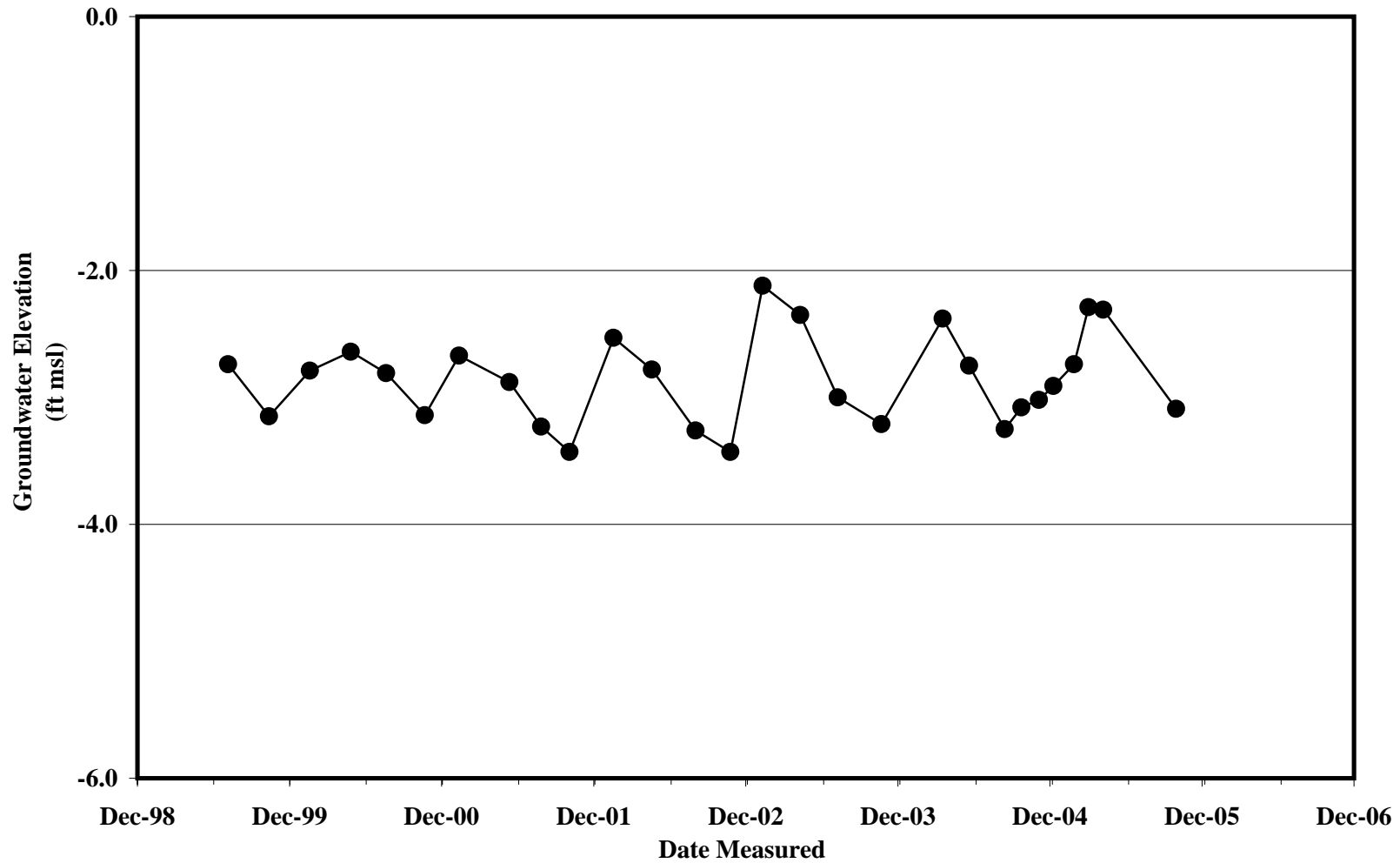


FIGURE D-5

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-8**

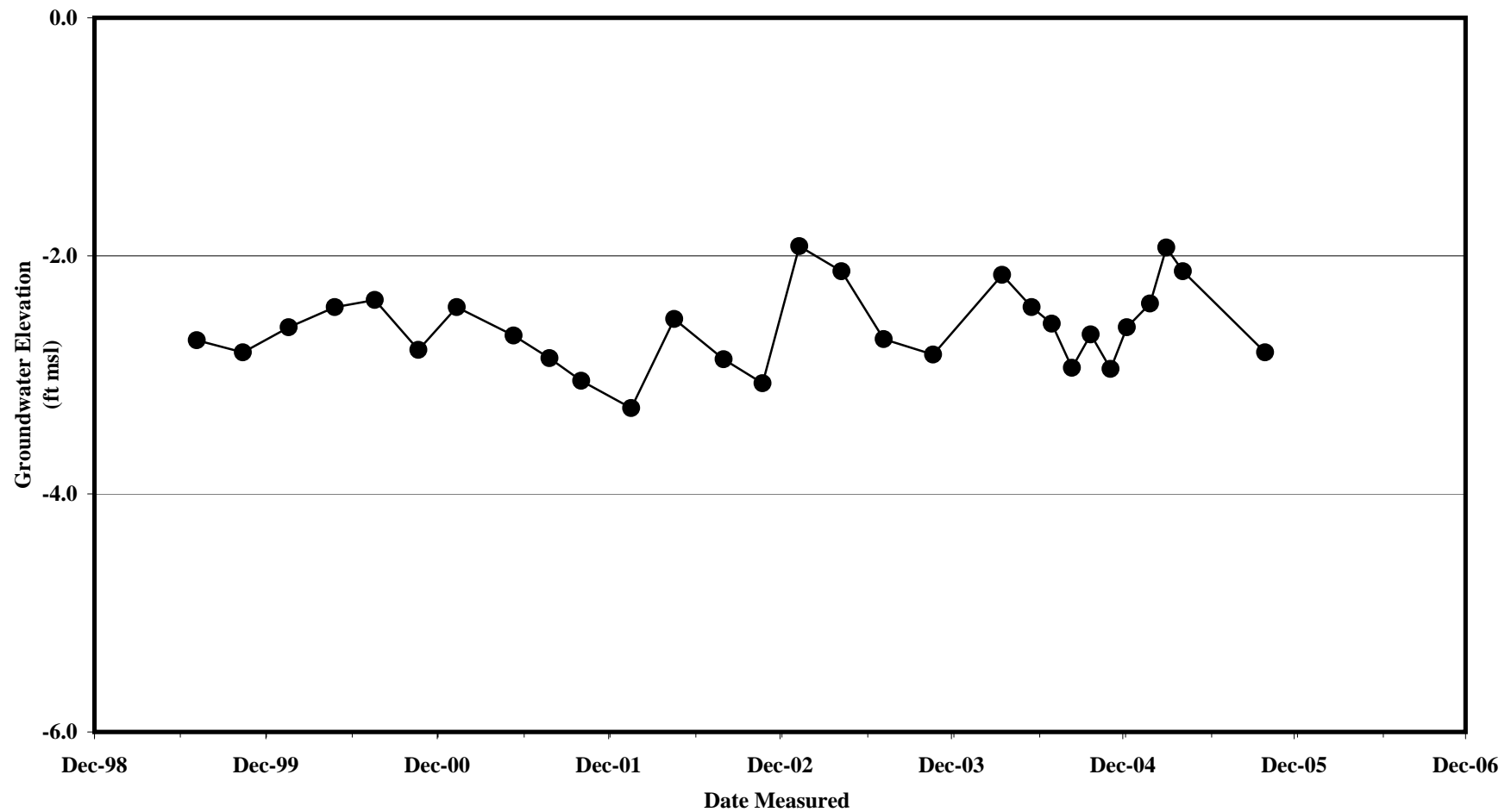


FIGURE D-6

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPHS, WELLS W1-12 AND W1-12R**

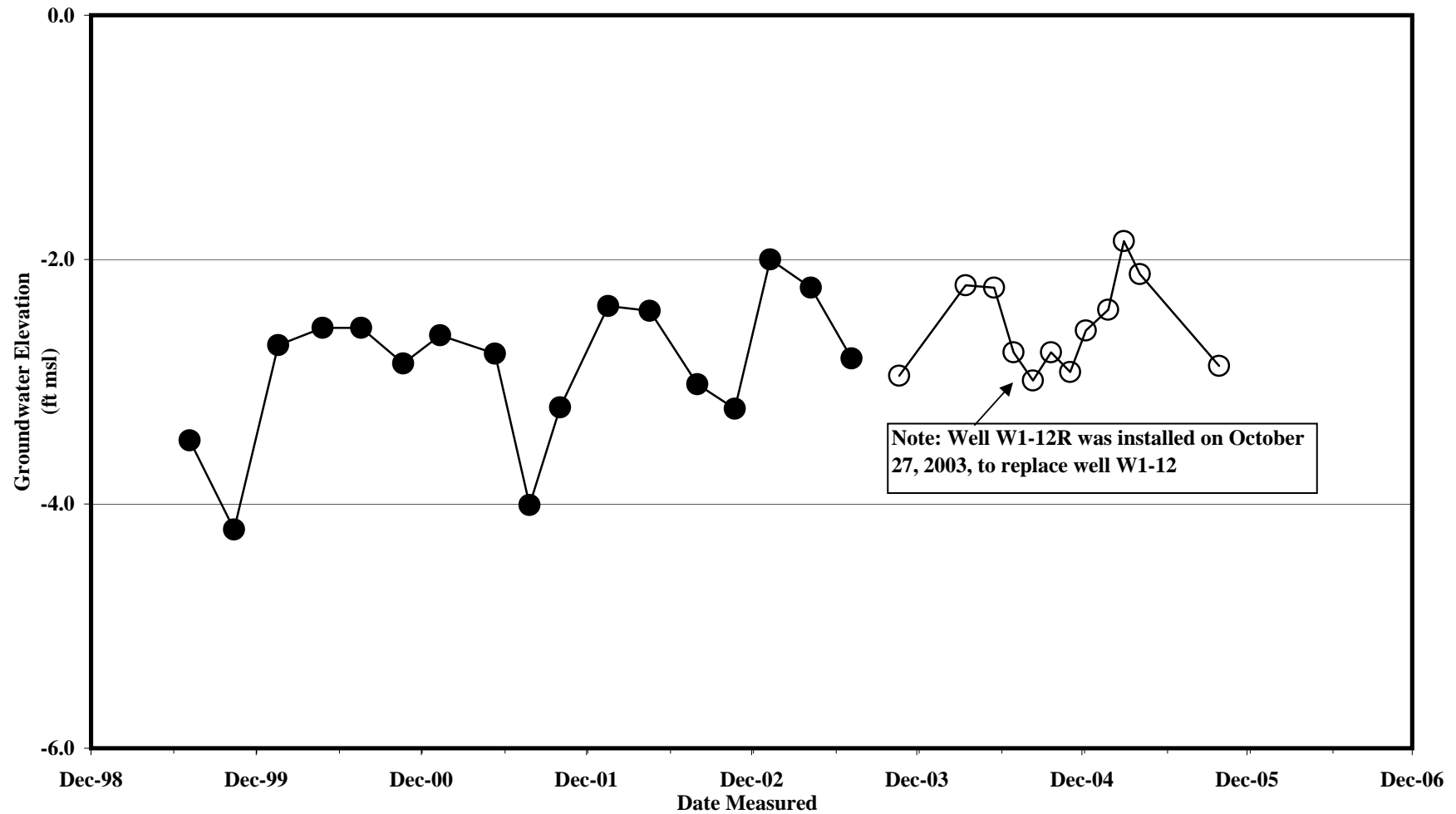


FIGURE D-7

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-14**

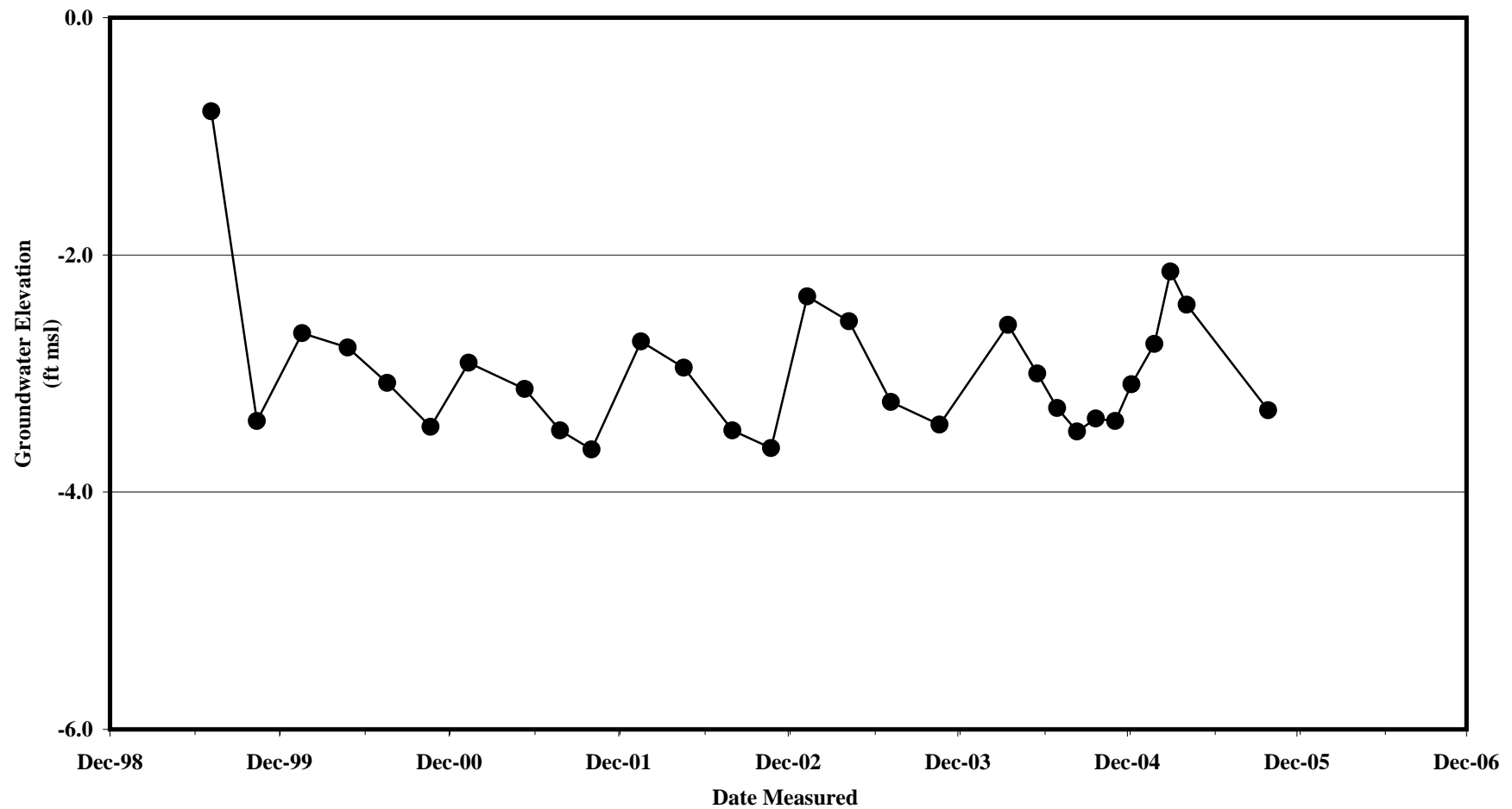


FIGURE D-8

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-15**

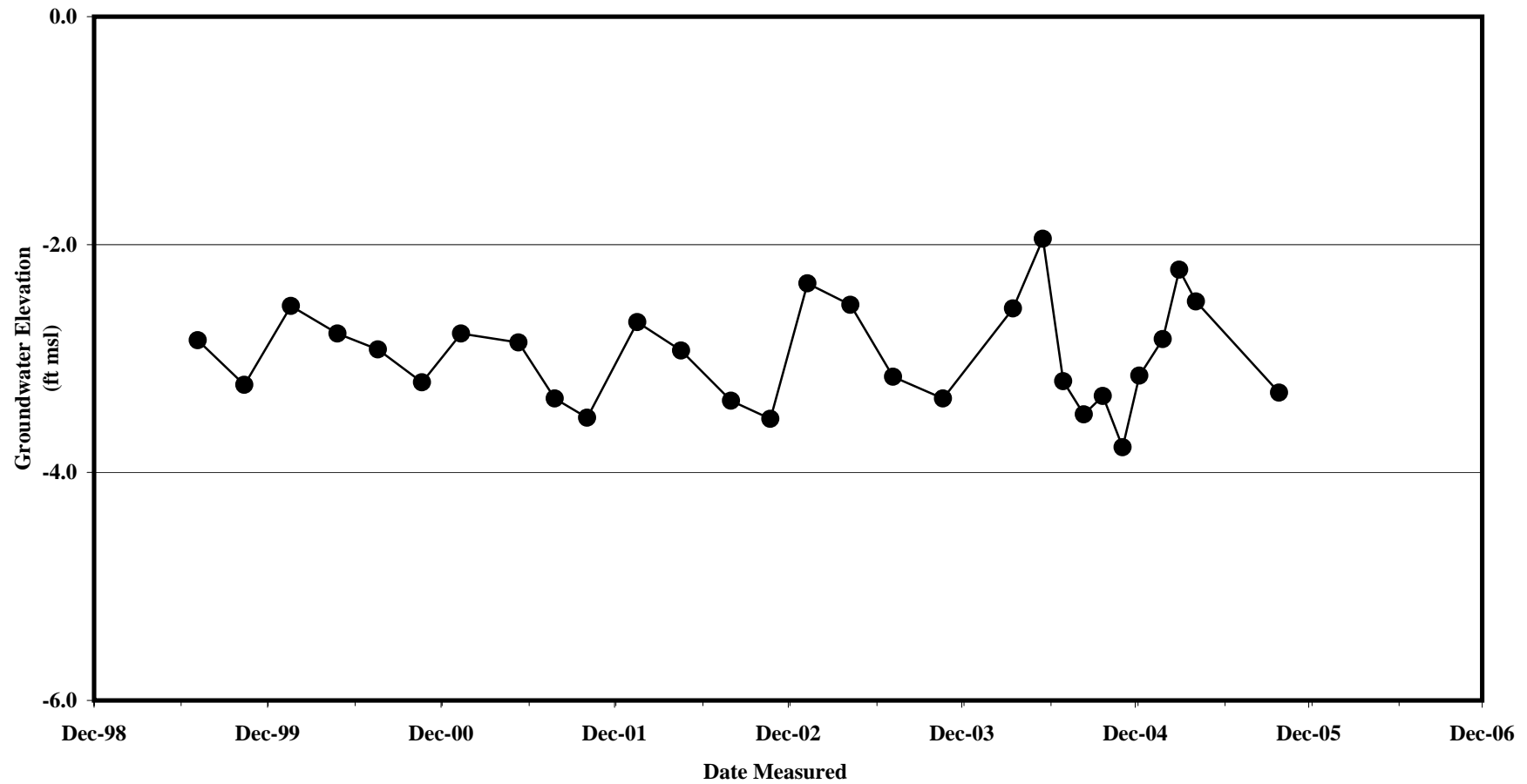


FIGURE D-9

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-16**

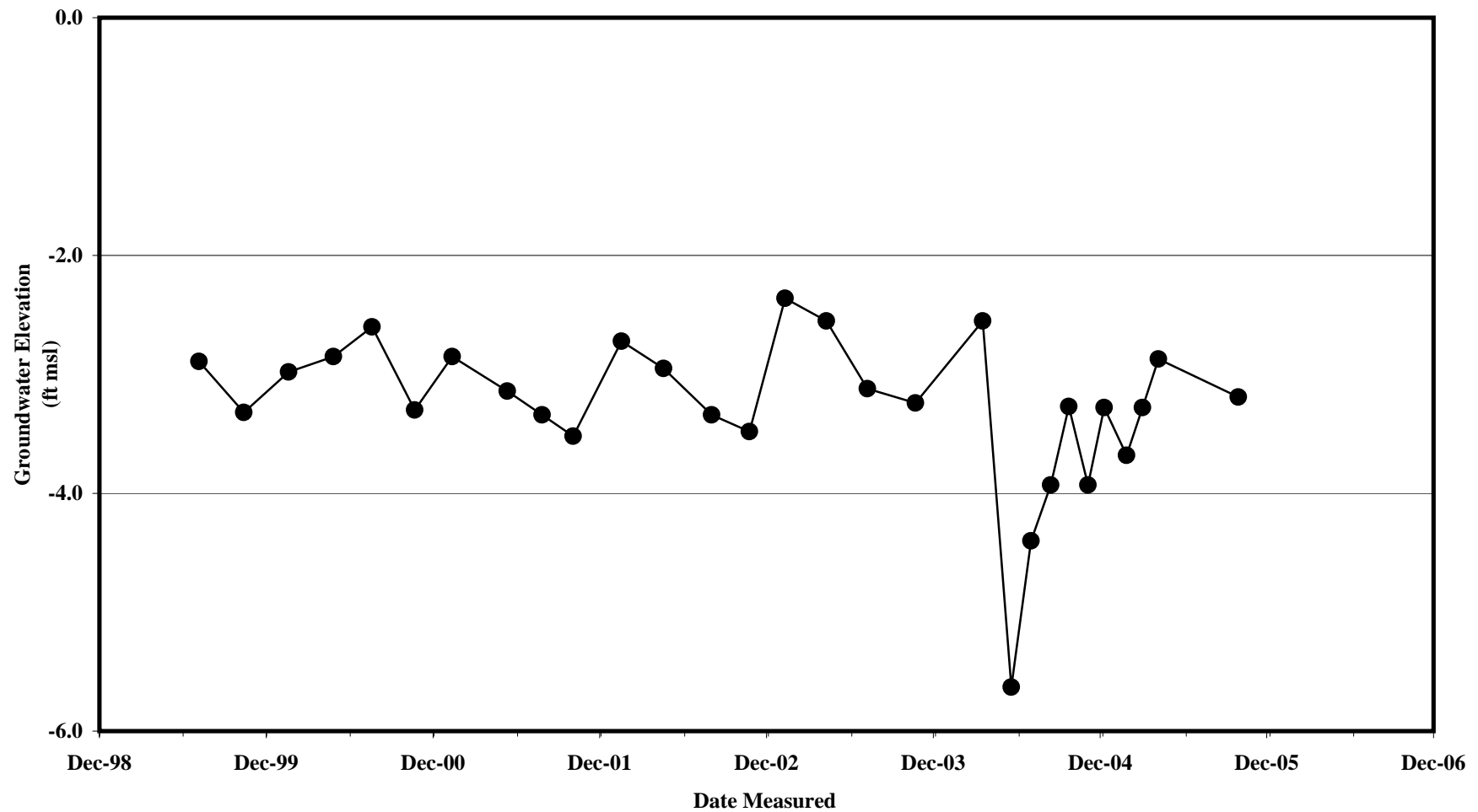


FIGURE D-10

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-19**

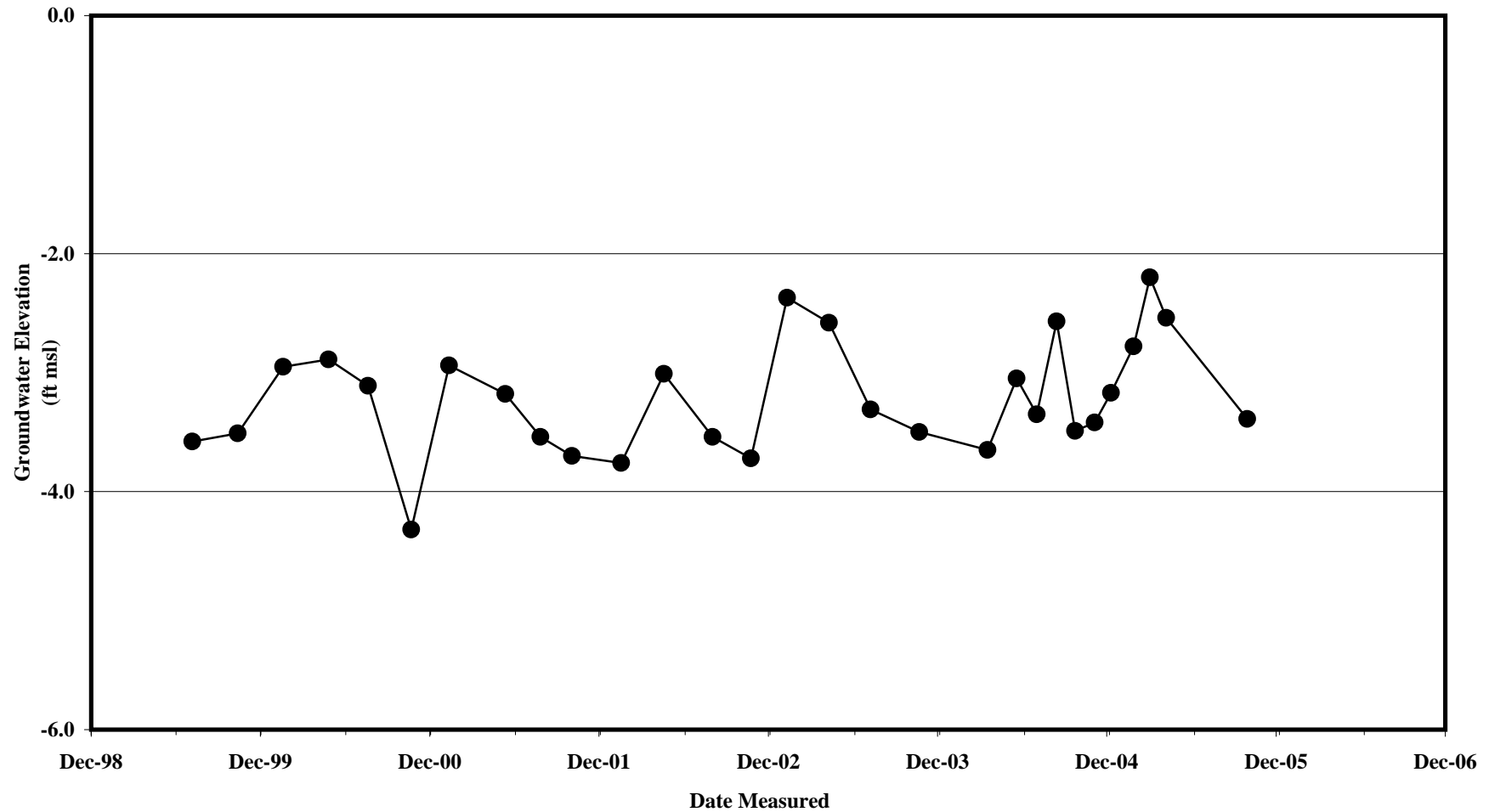


FIGURE D-11

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-20**

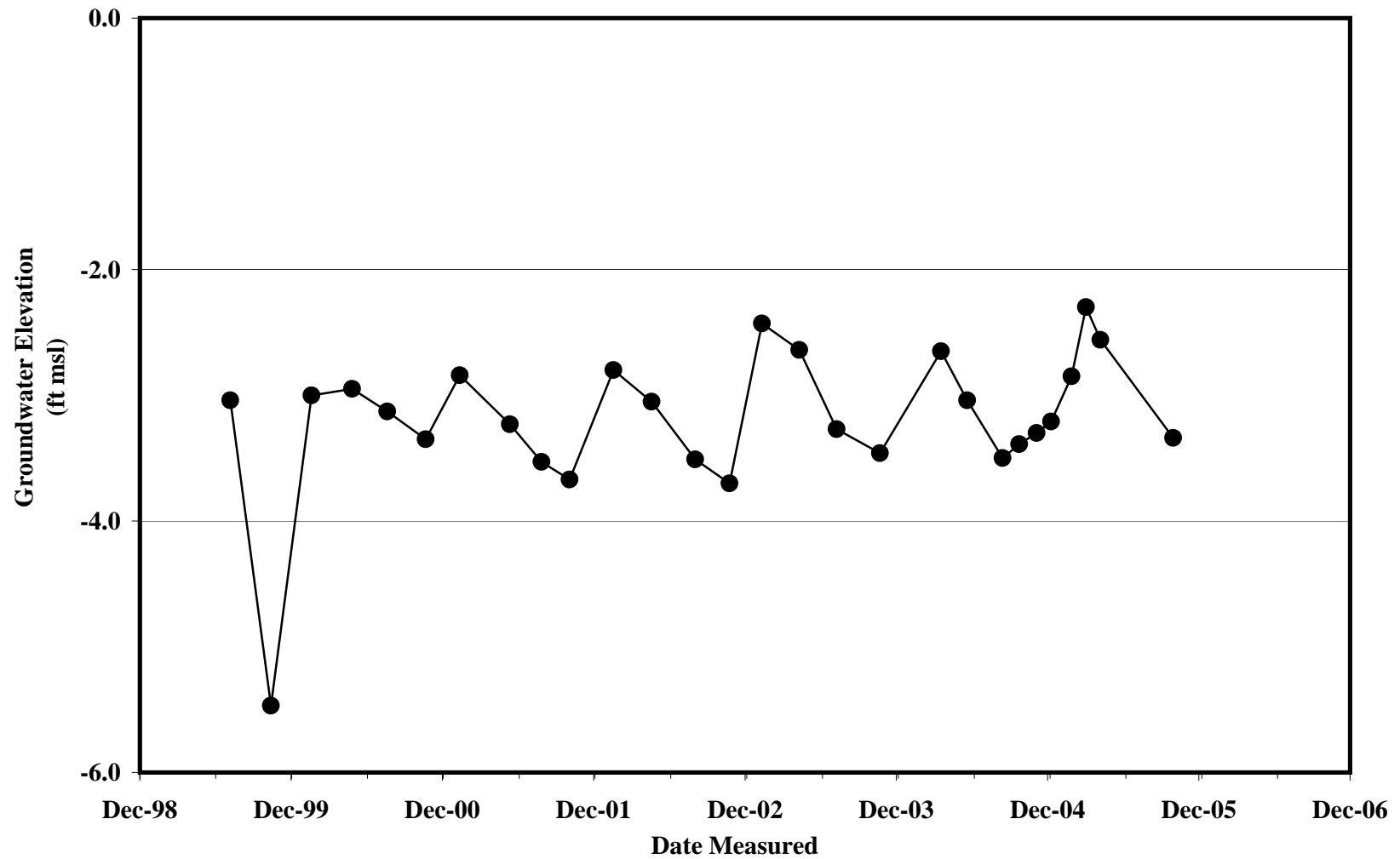


FIGURE D-12

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-22**

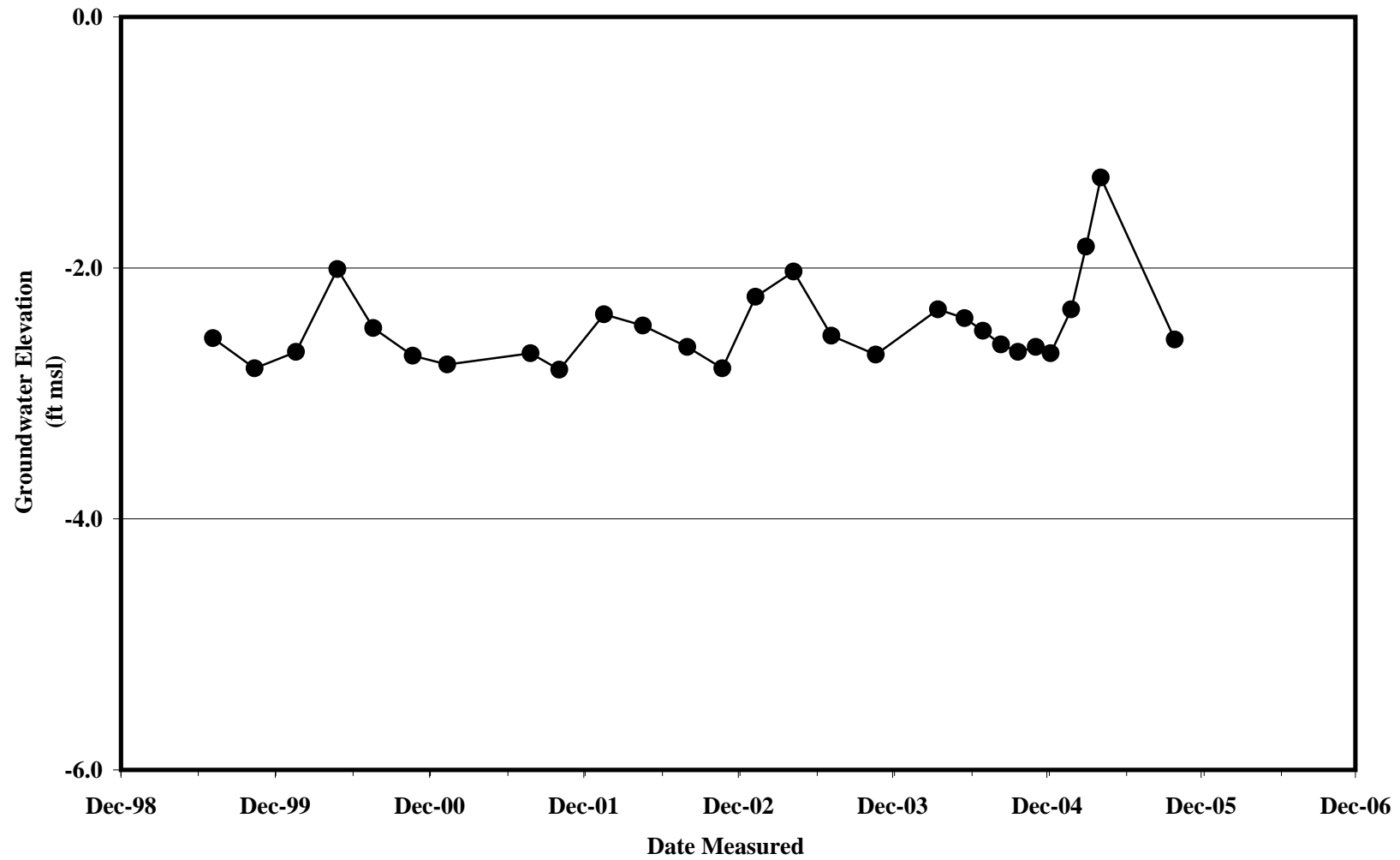
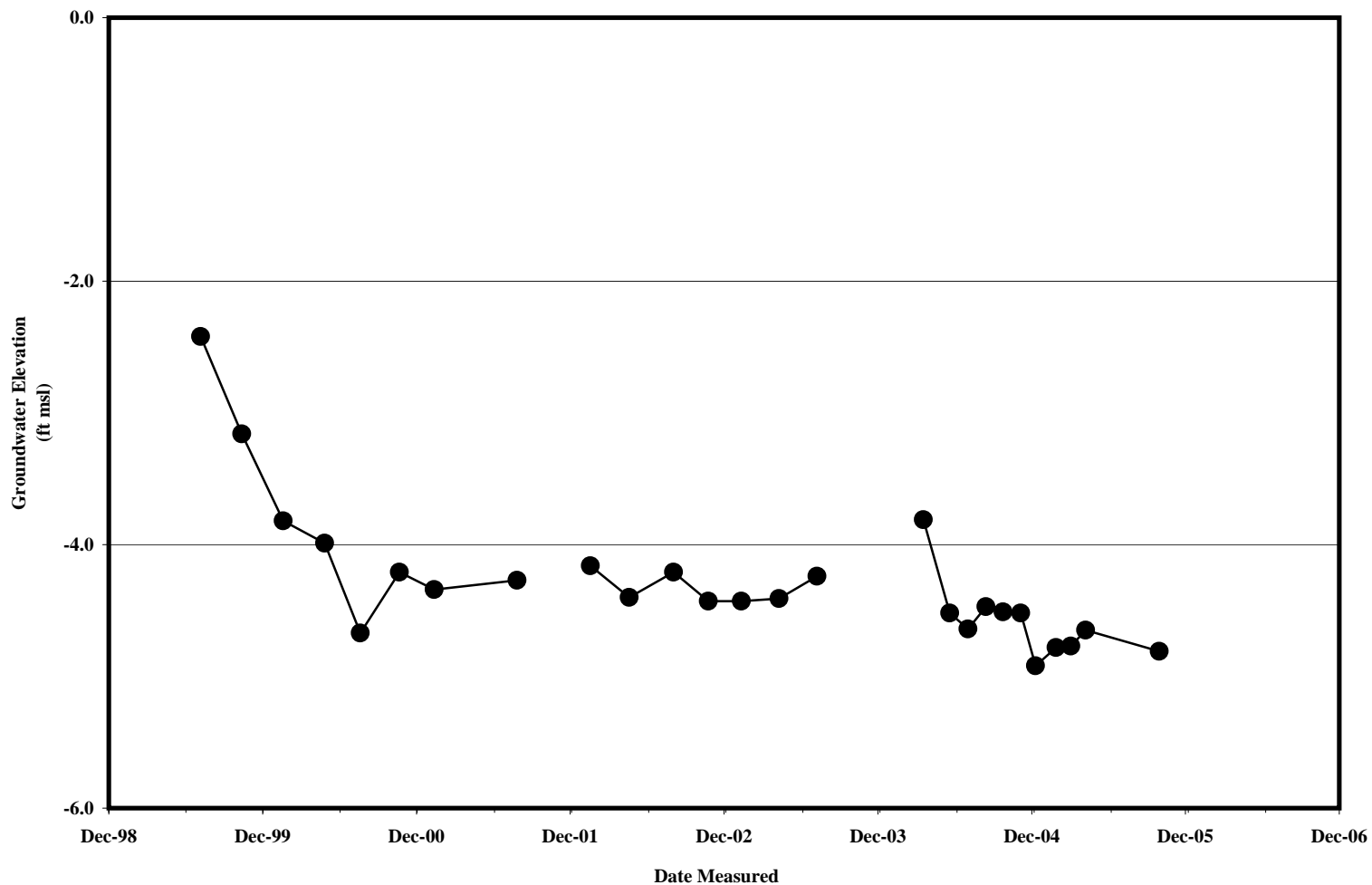


FIGURE D-13

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-23**



Notes:

1. Breaks in hydrograph line indicate that the collection trench was dry during the respective time period.

FIGURE D-14

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL W1-24**

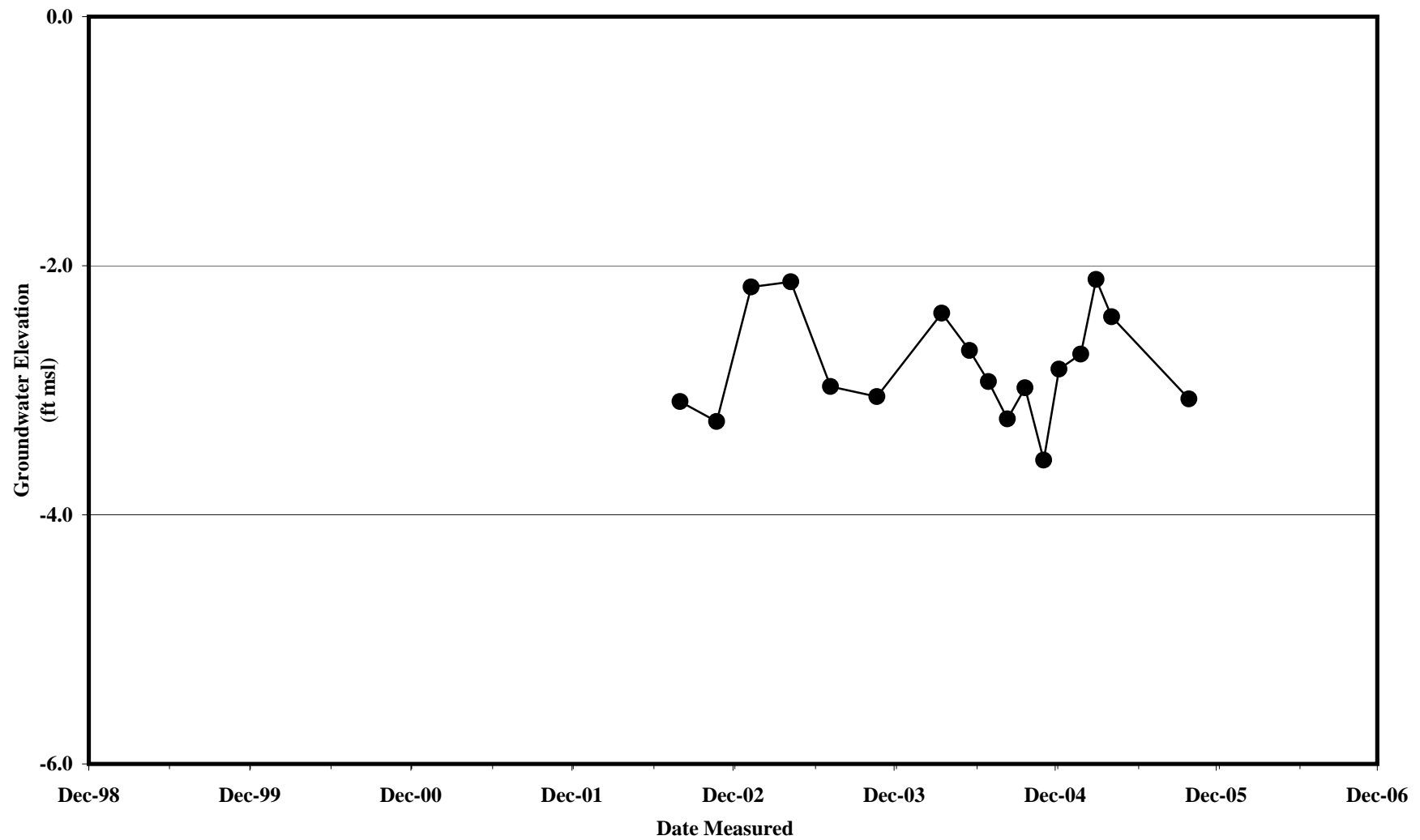


FIGURE D-15

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, PIEZOMETER PZ1-18**

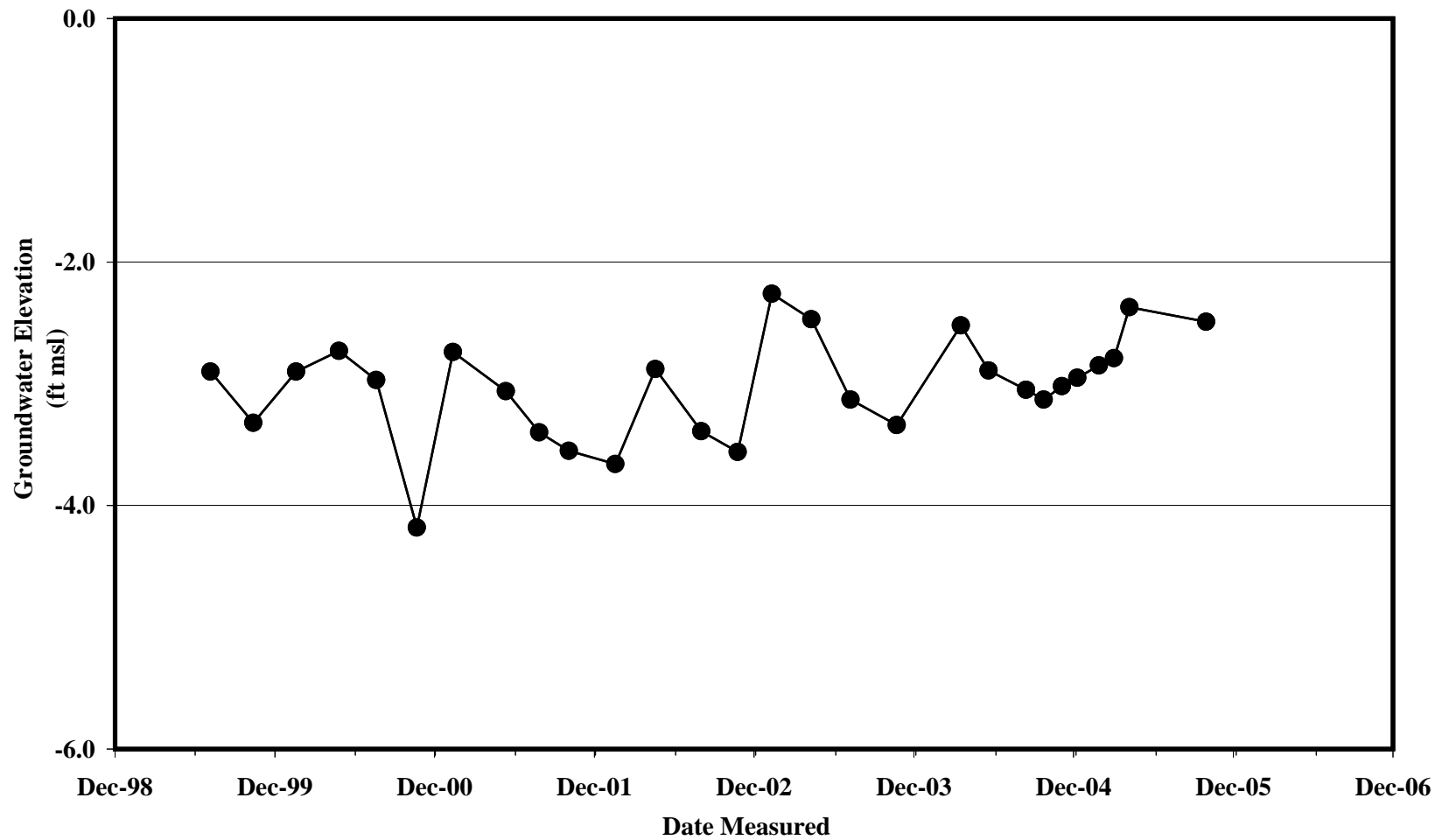


FIGURE D-16

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPH, WELL PZ1-21**

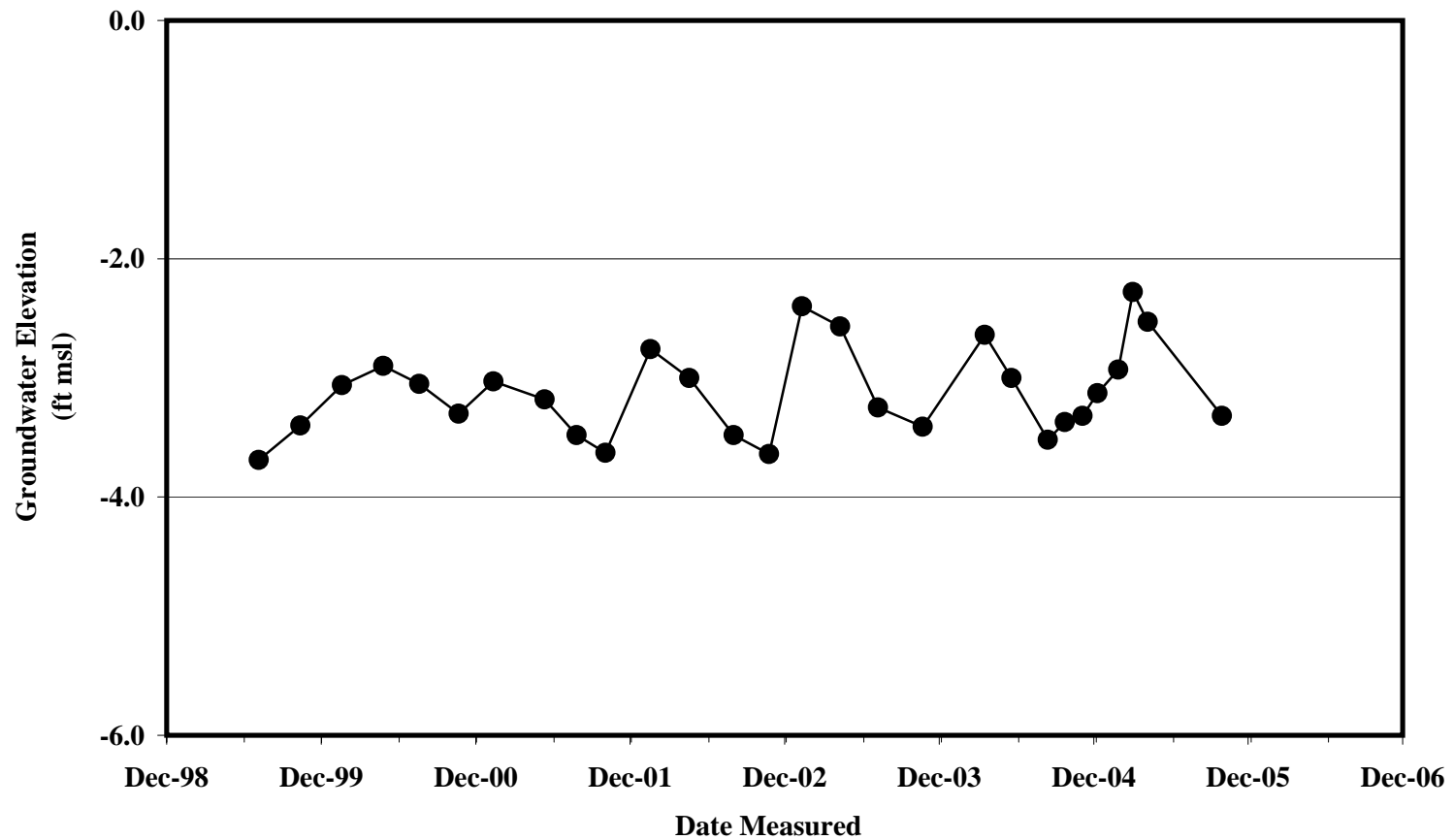


FIGURE D-17

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPHS, PIEZOMETER PZ1-18 AND WELL W1-19

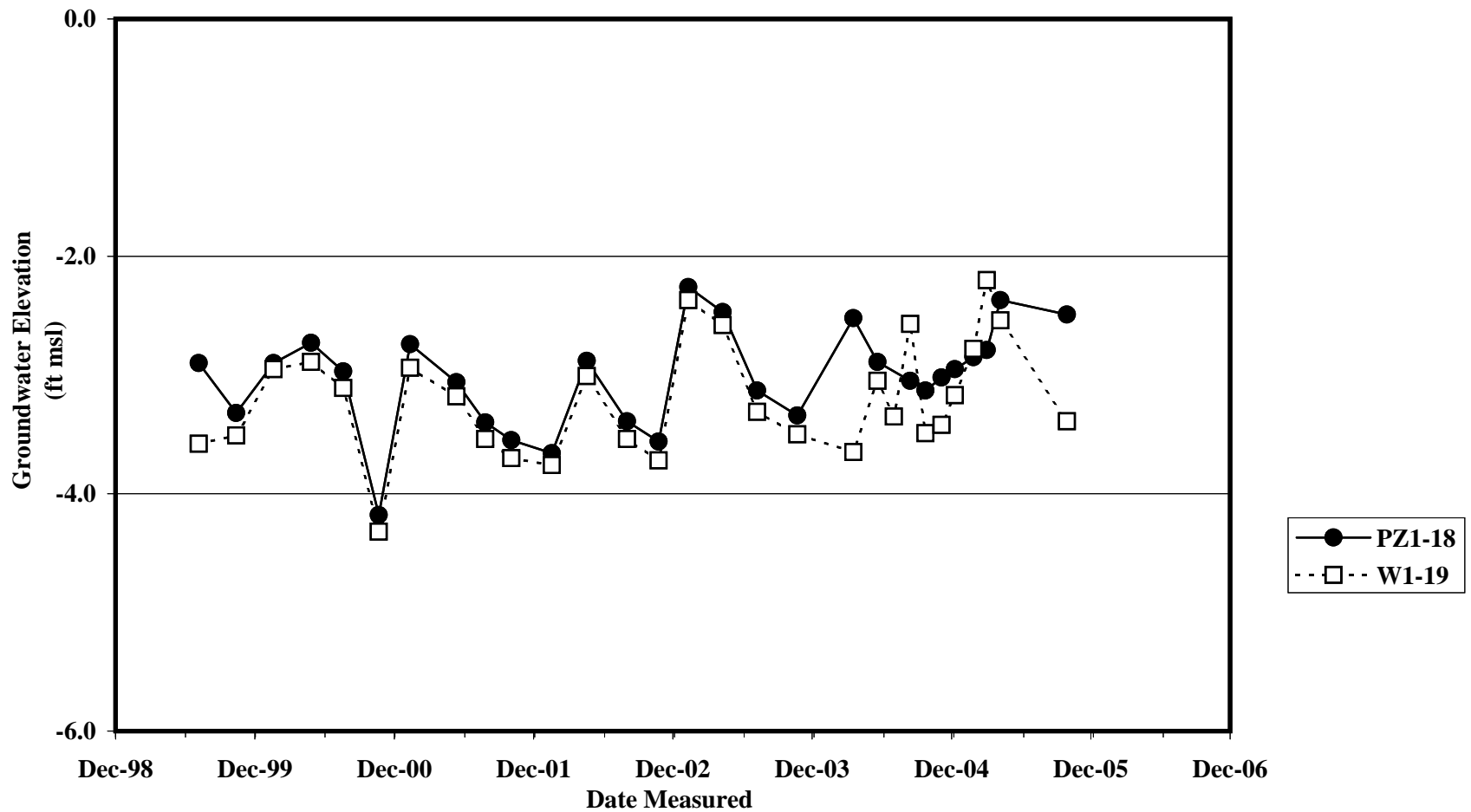
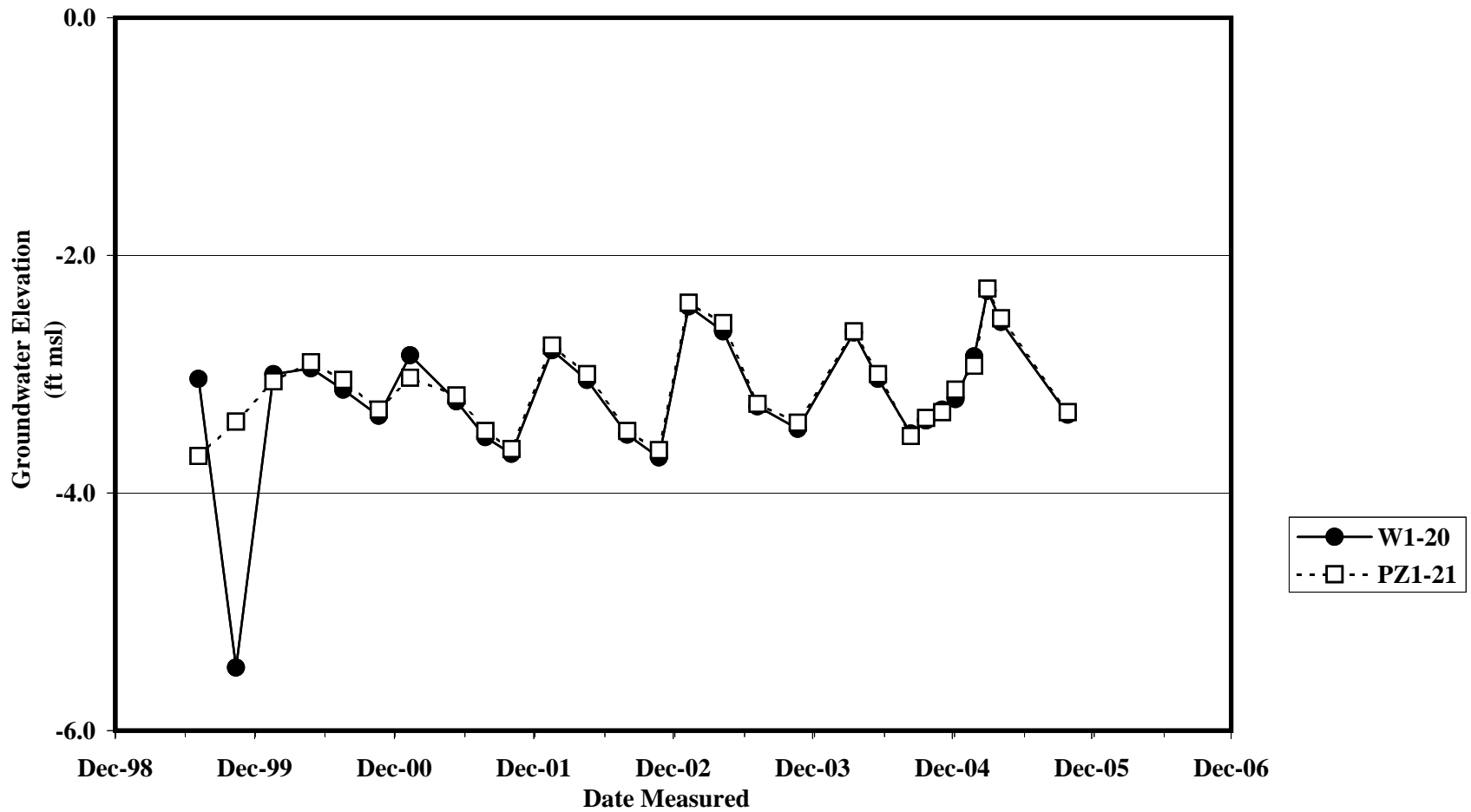


FIGURE D-18

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
GROUNDWATER HYDROGRAPHS, PIEZOMETER PZ1-21 AND WELL W1-20**

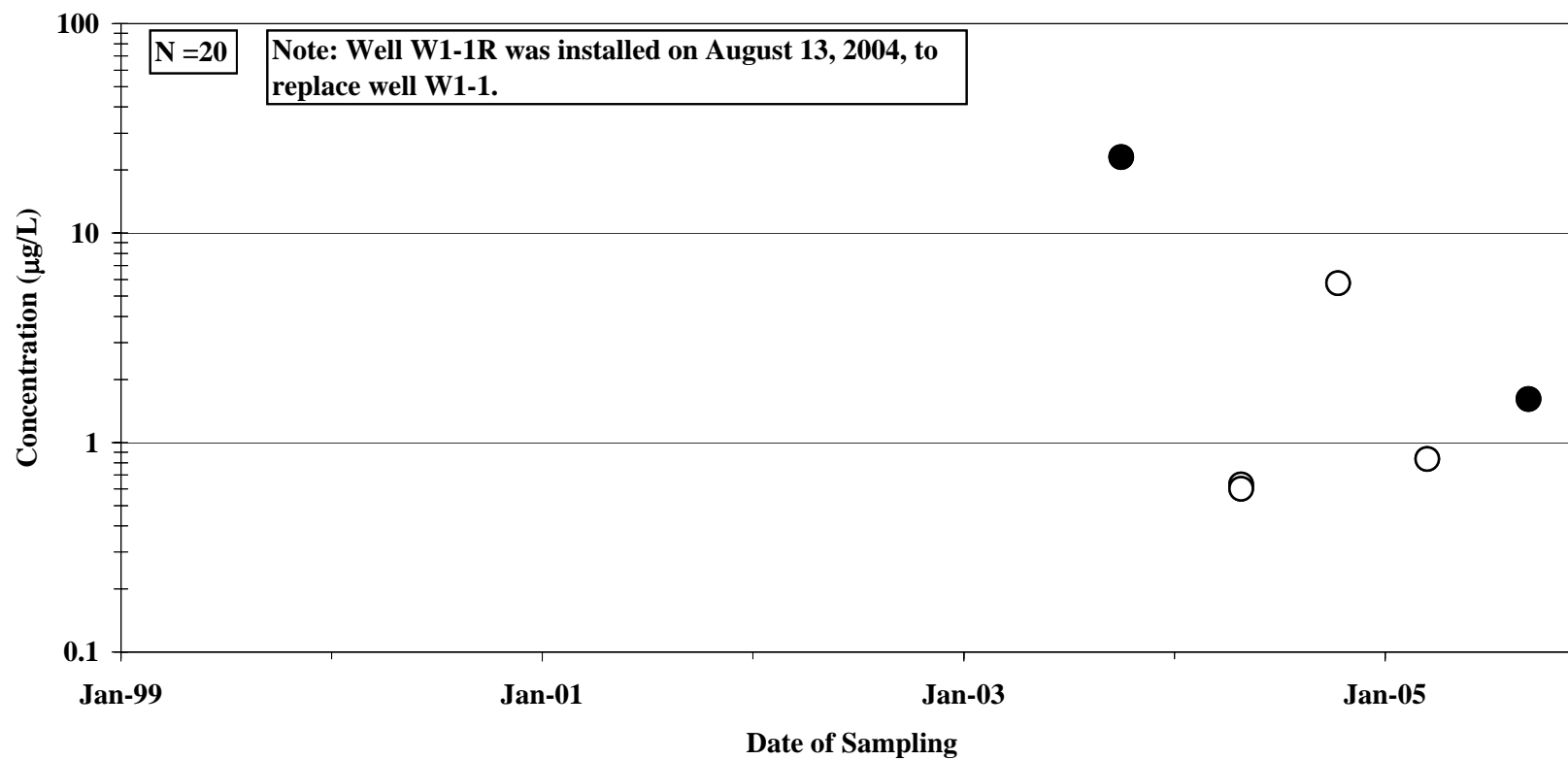


APPENDIX E

GROUNDWATER MONITORING POINT DATA GRAPHS

FIGURE E-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED ARSENIC CONCENTRATIONS IN DOWNGRADIENT MONITORING WELL W1-1 / W1-1R**

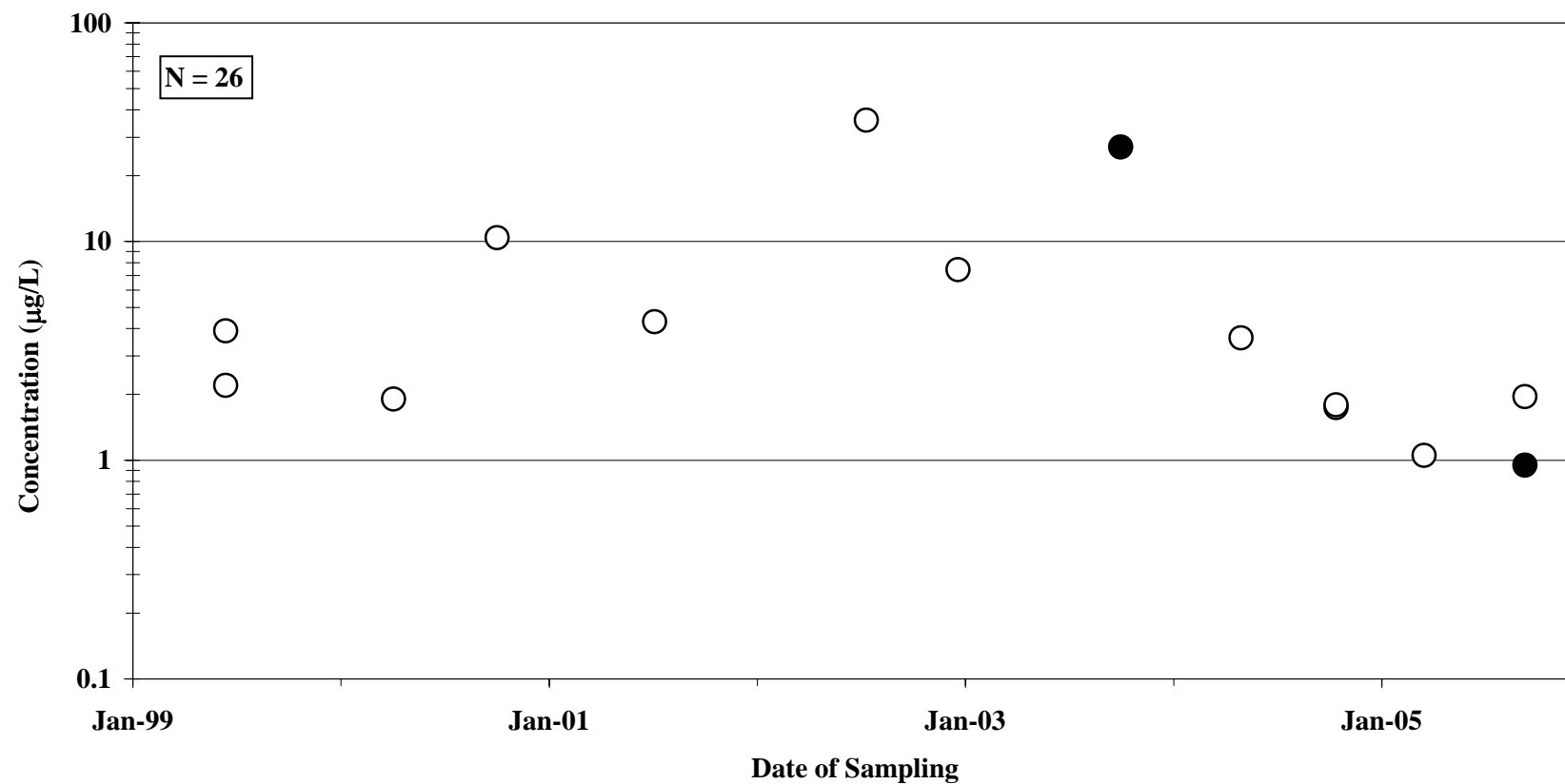


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-2

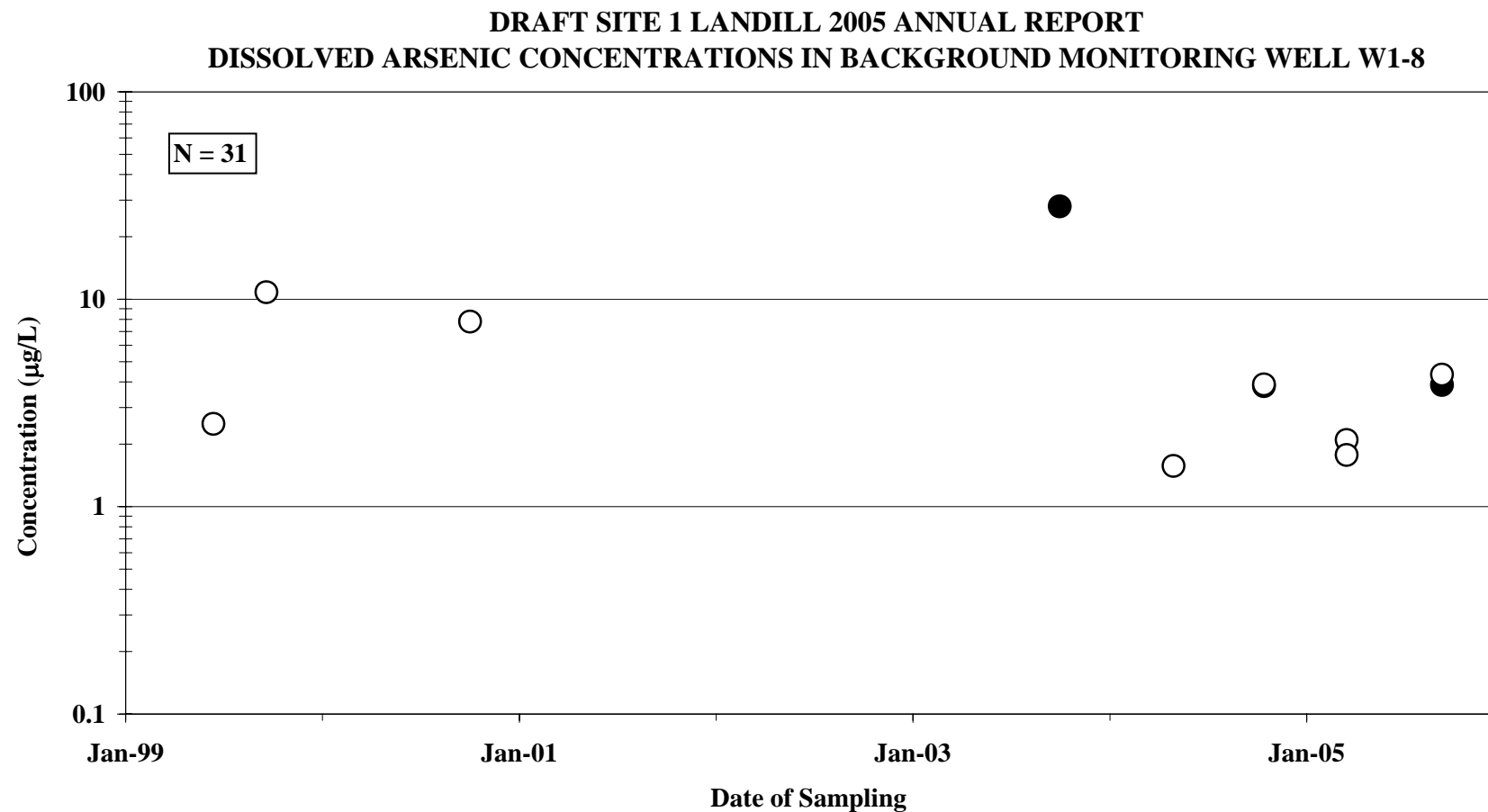
**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED ARSENIC CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-5**



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

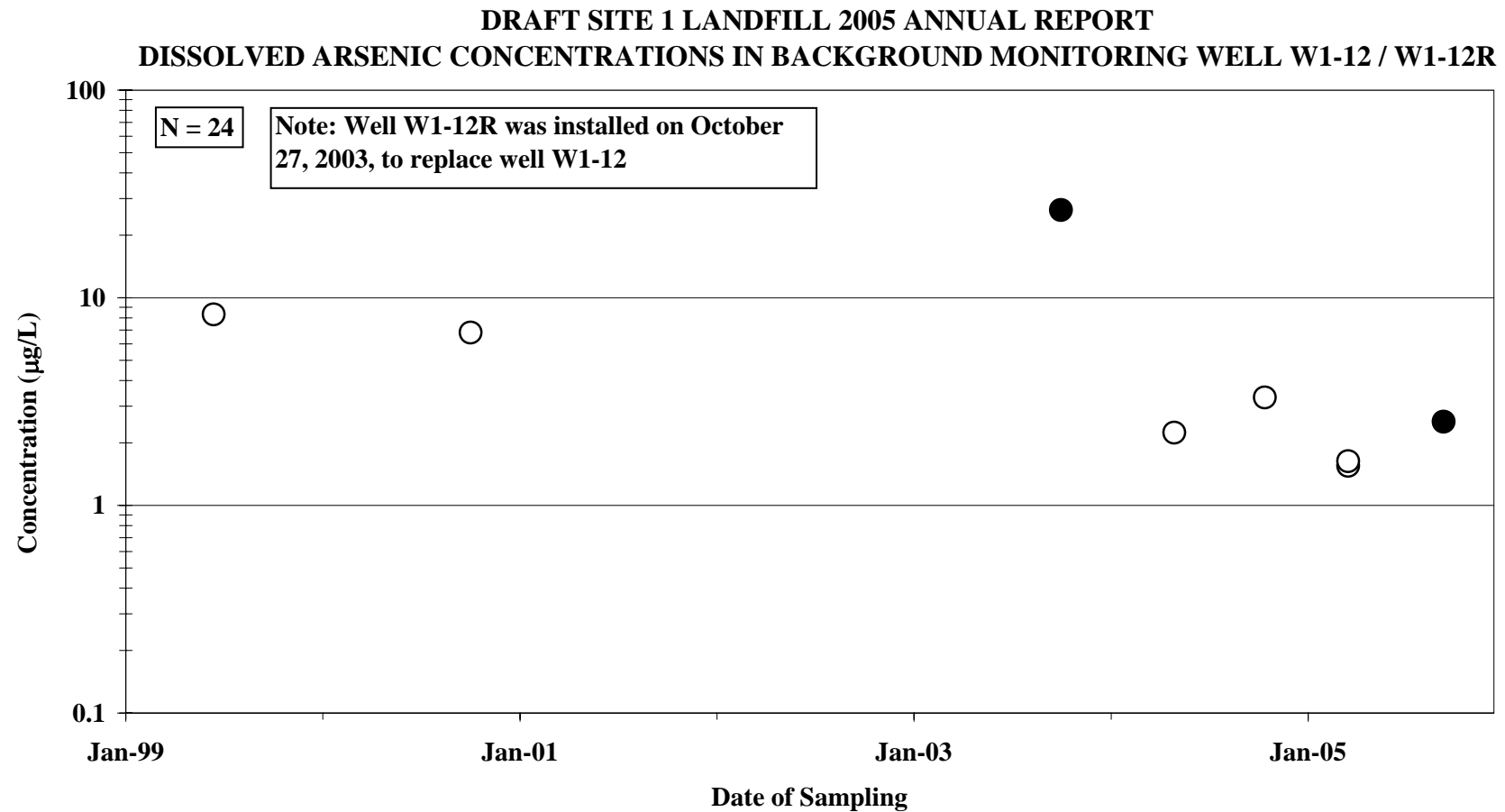
FIGURE E-3



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

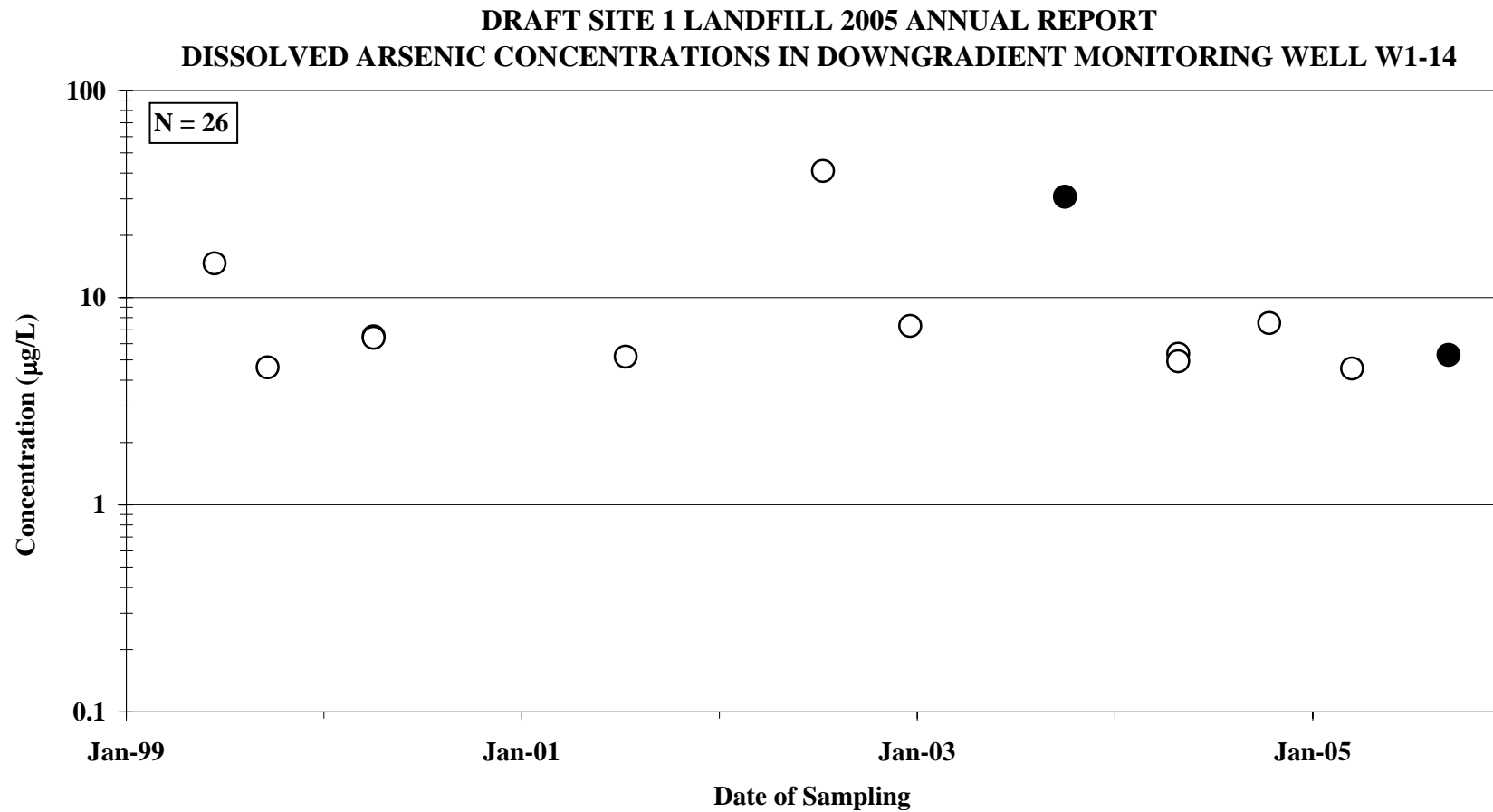
FIGURE E-4



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

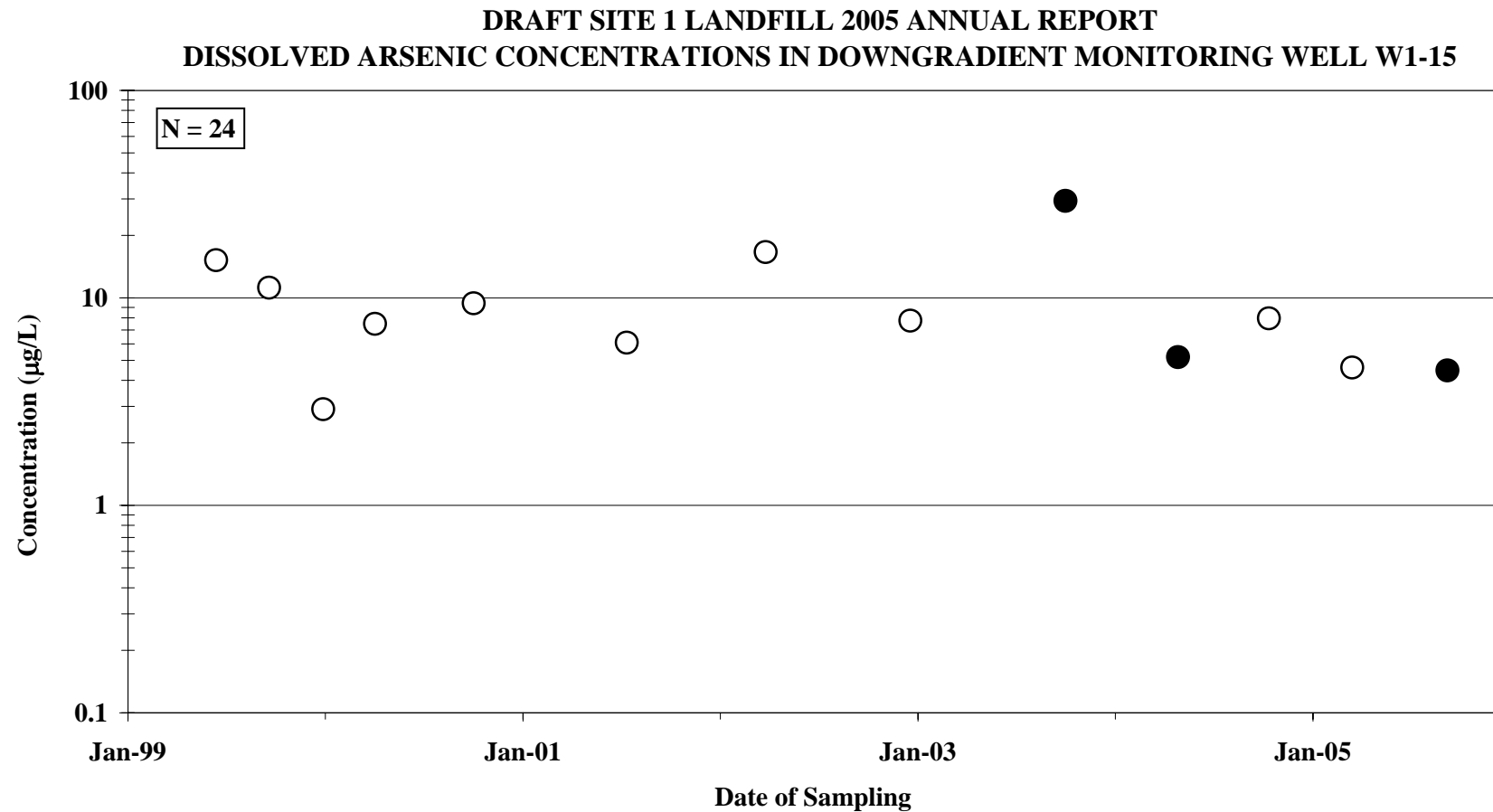
FIGURE E-5



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

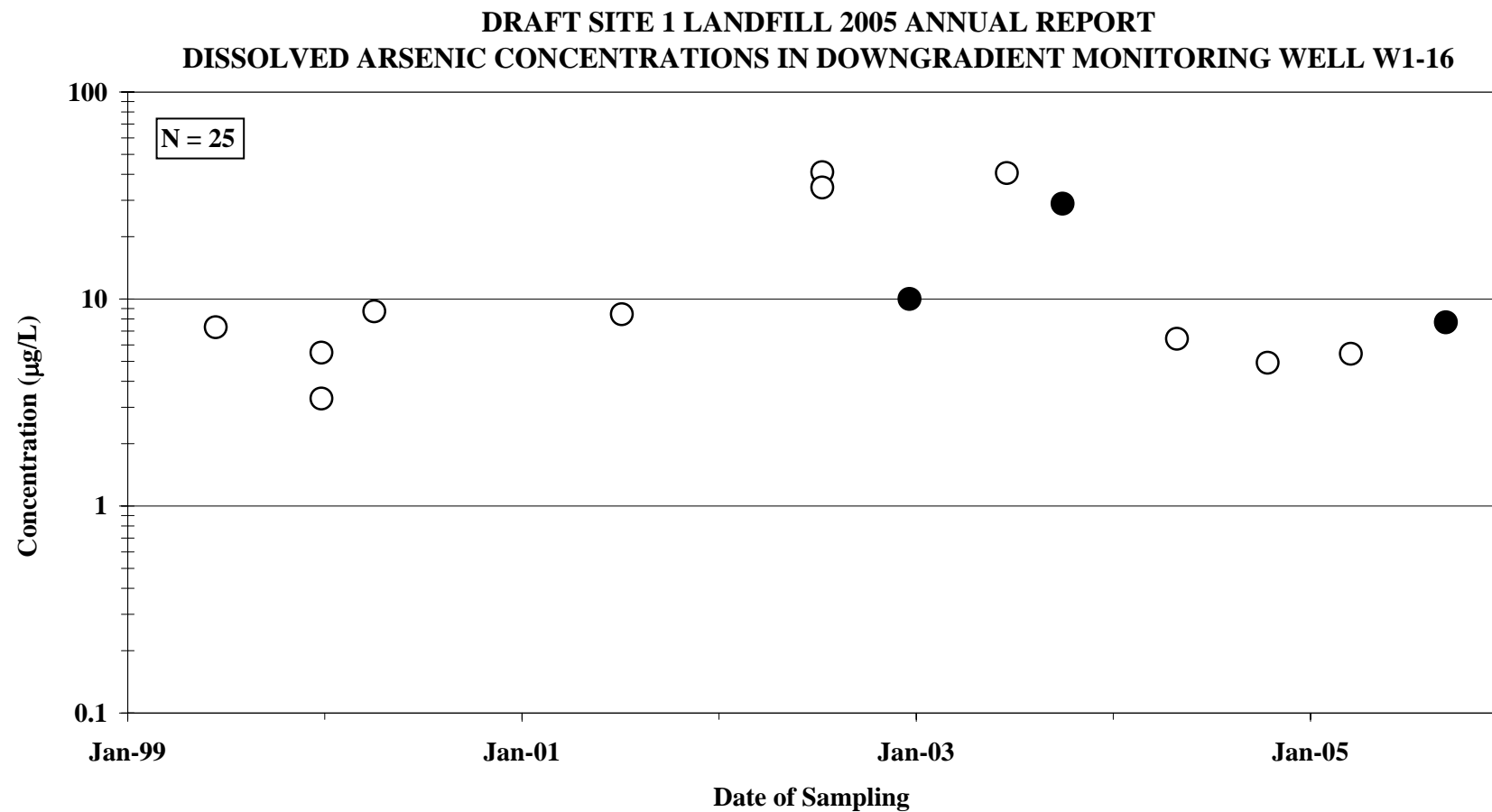
FIGURE E-6



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

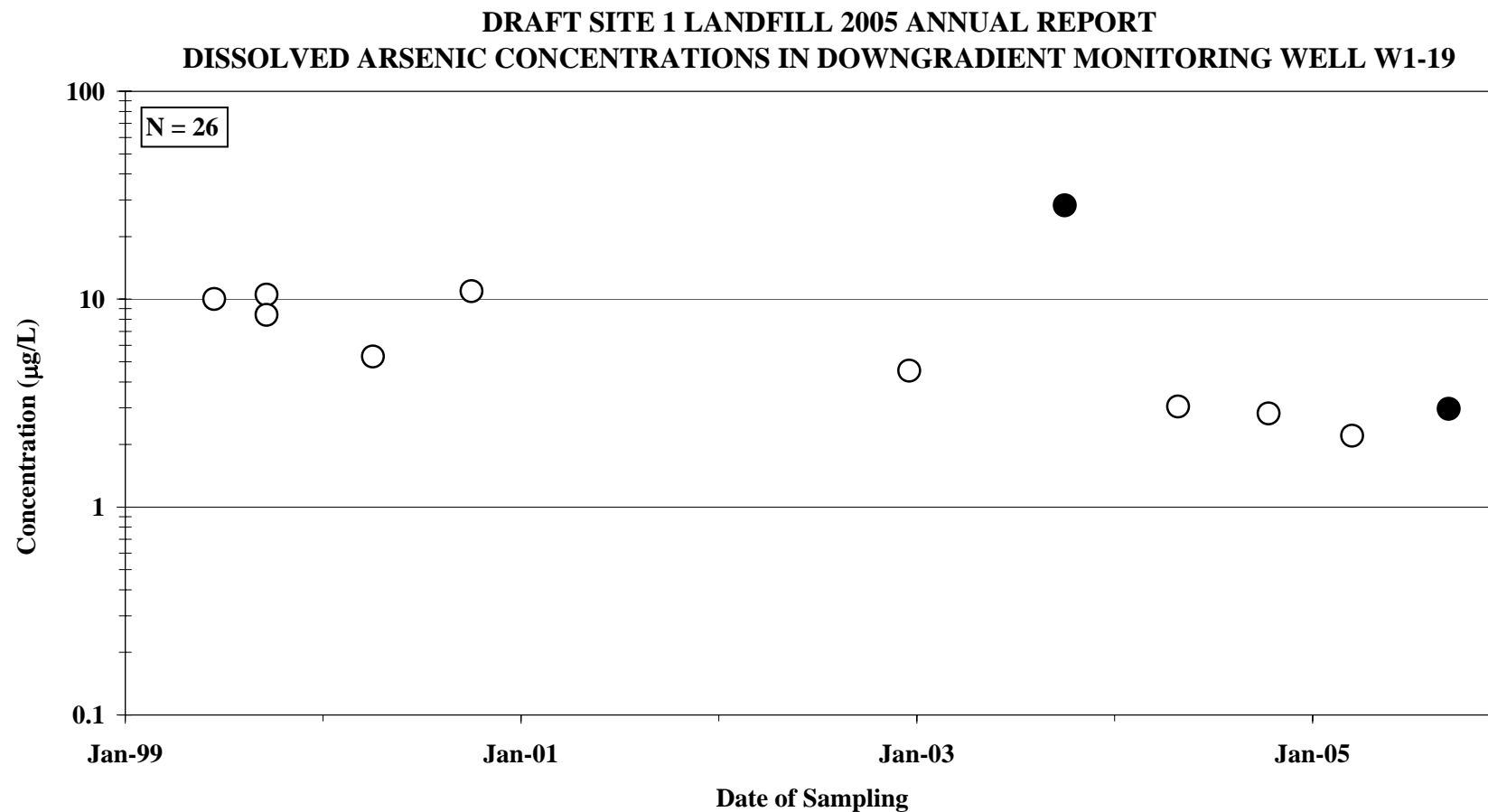
FIGURE E-7



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

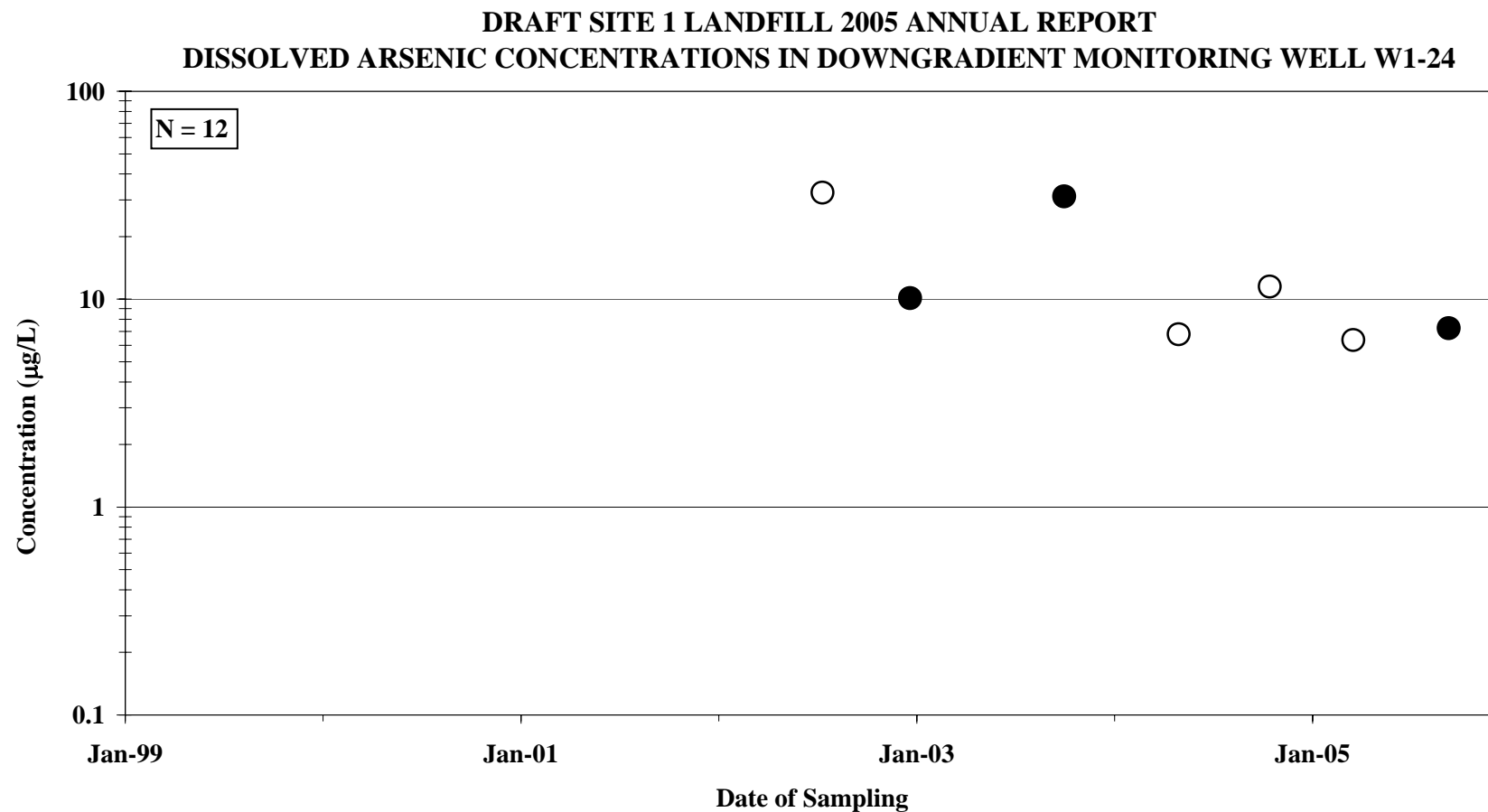
FIGURE E-8



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-9

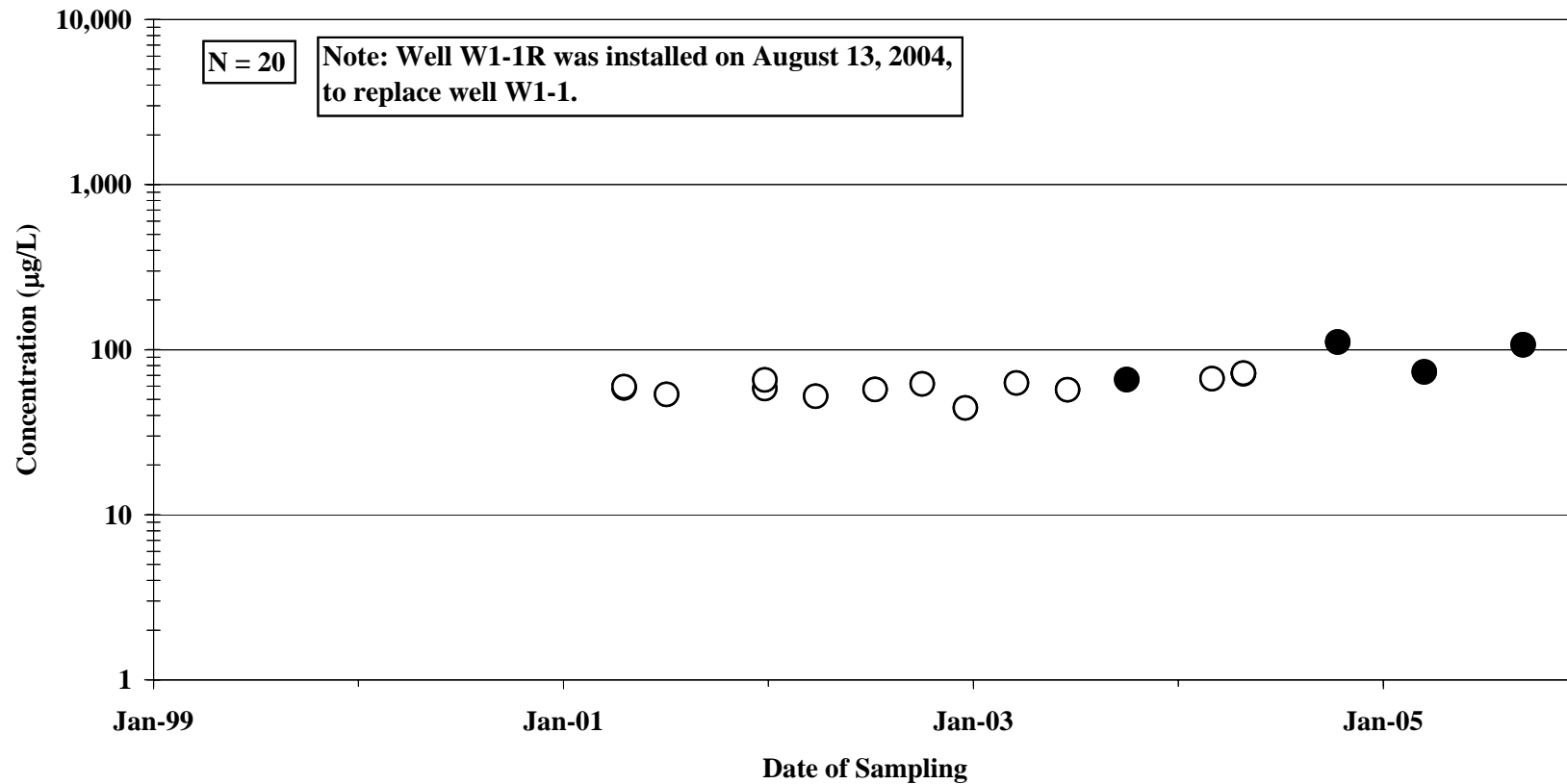


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-10

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED BARIUM CONCENTRATIONS IN DOWNGRADIENT MONITORING WELL W1-1 / W1-1R**



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED BARIUM CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-5

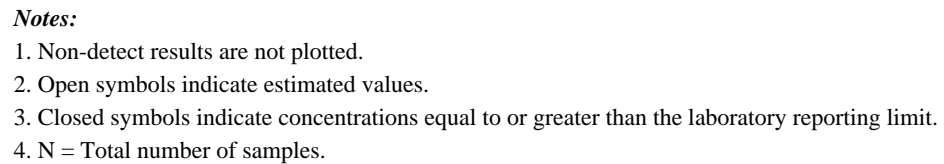
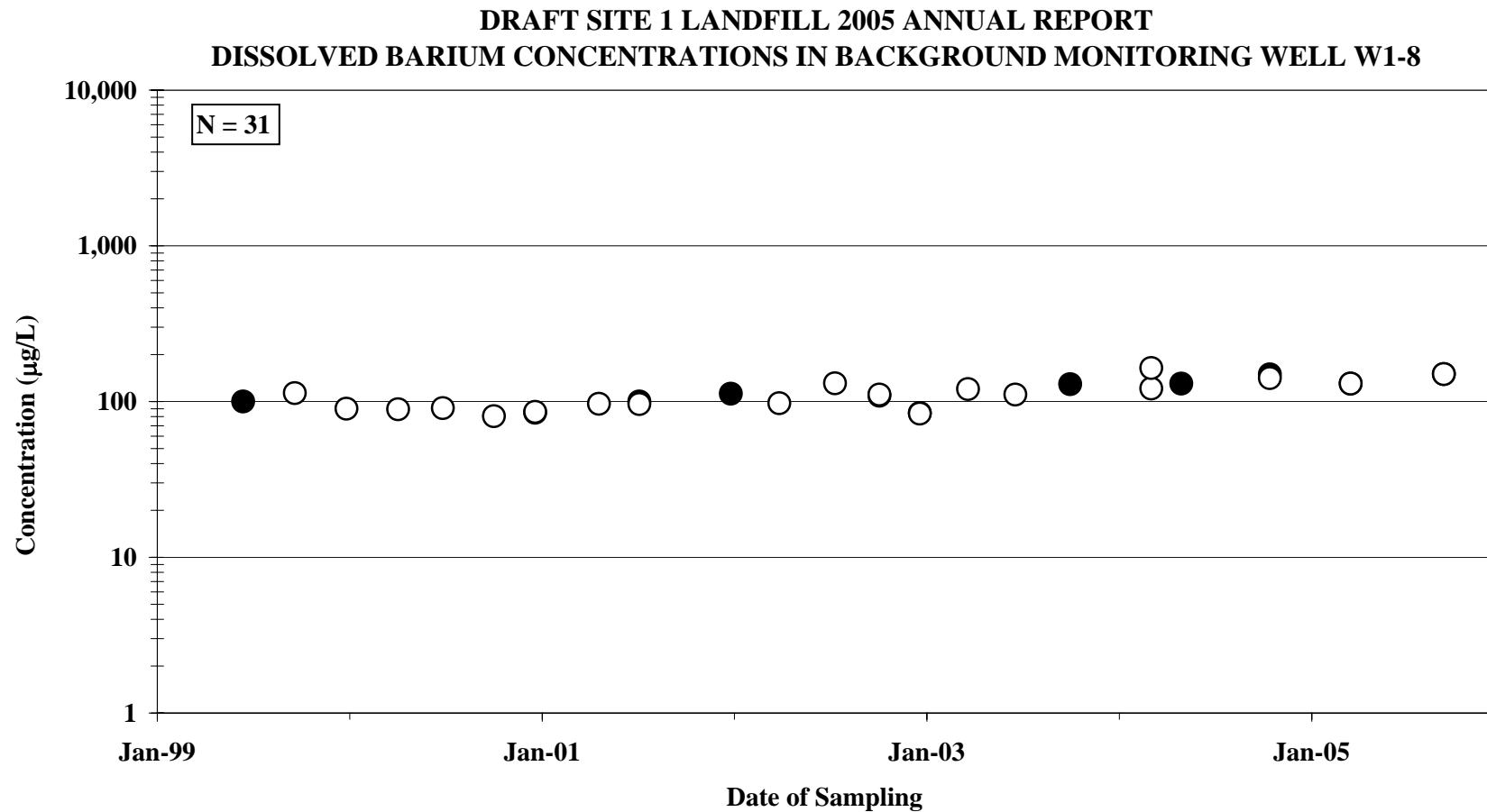


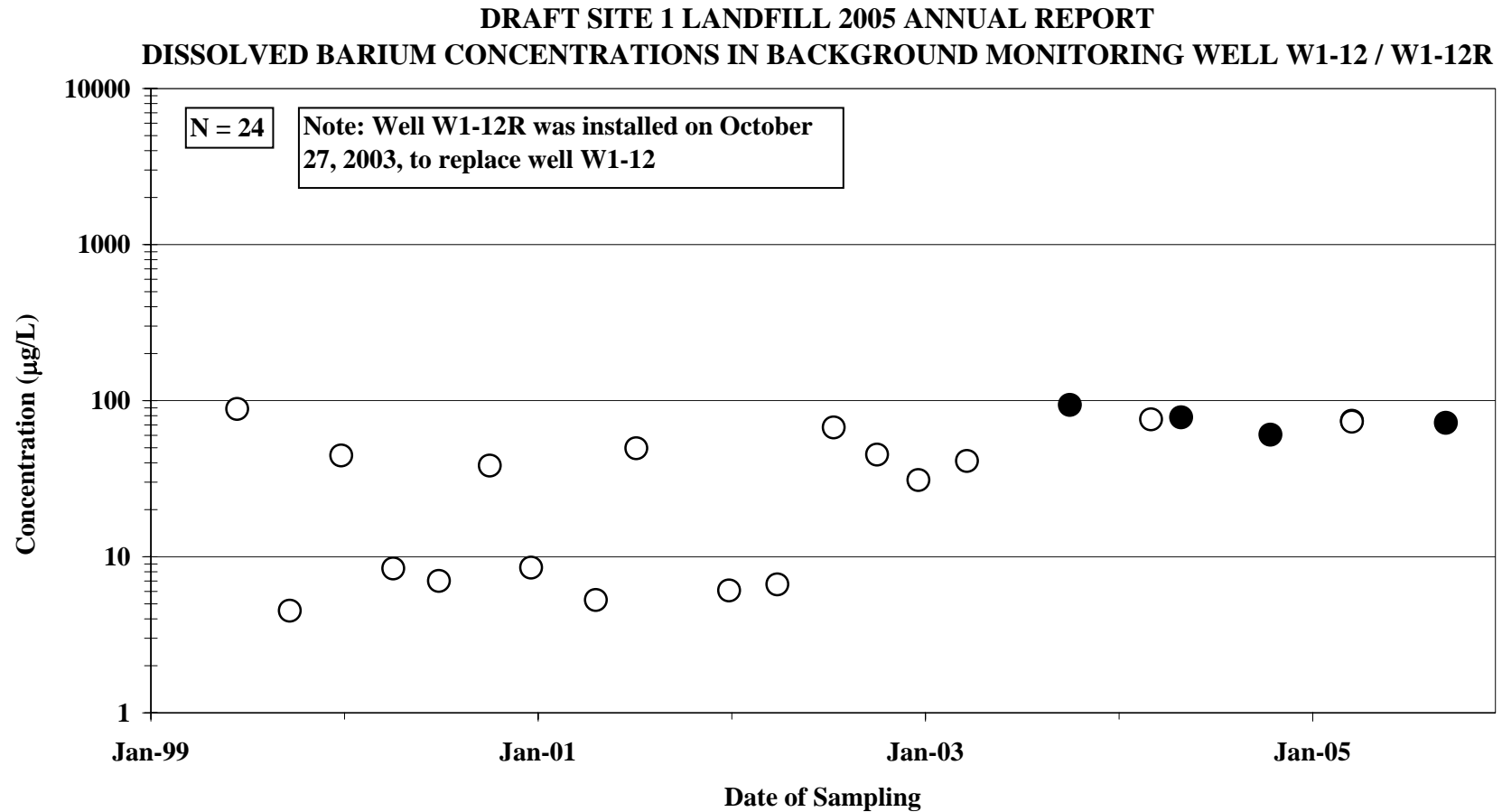
FIGURE E-12



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

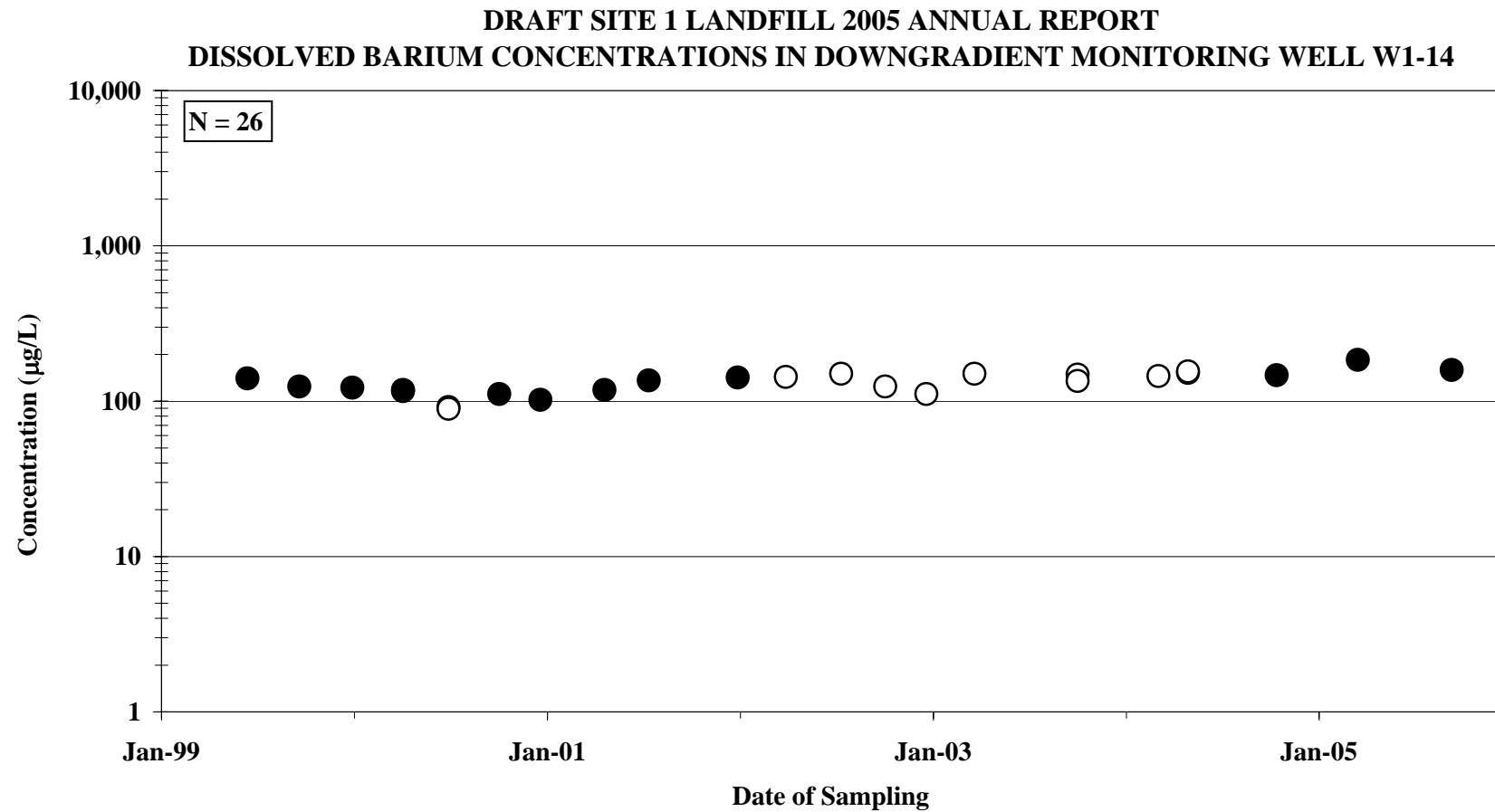
FIGURE E-13



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-14



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED BARIUM CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-15

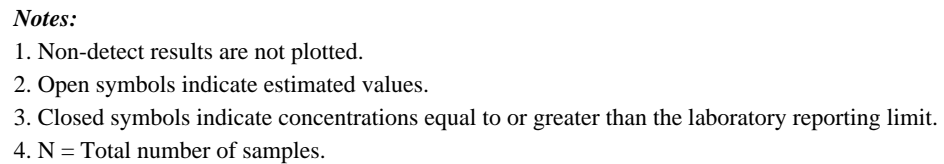
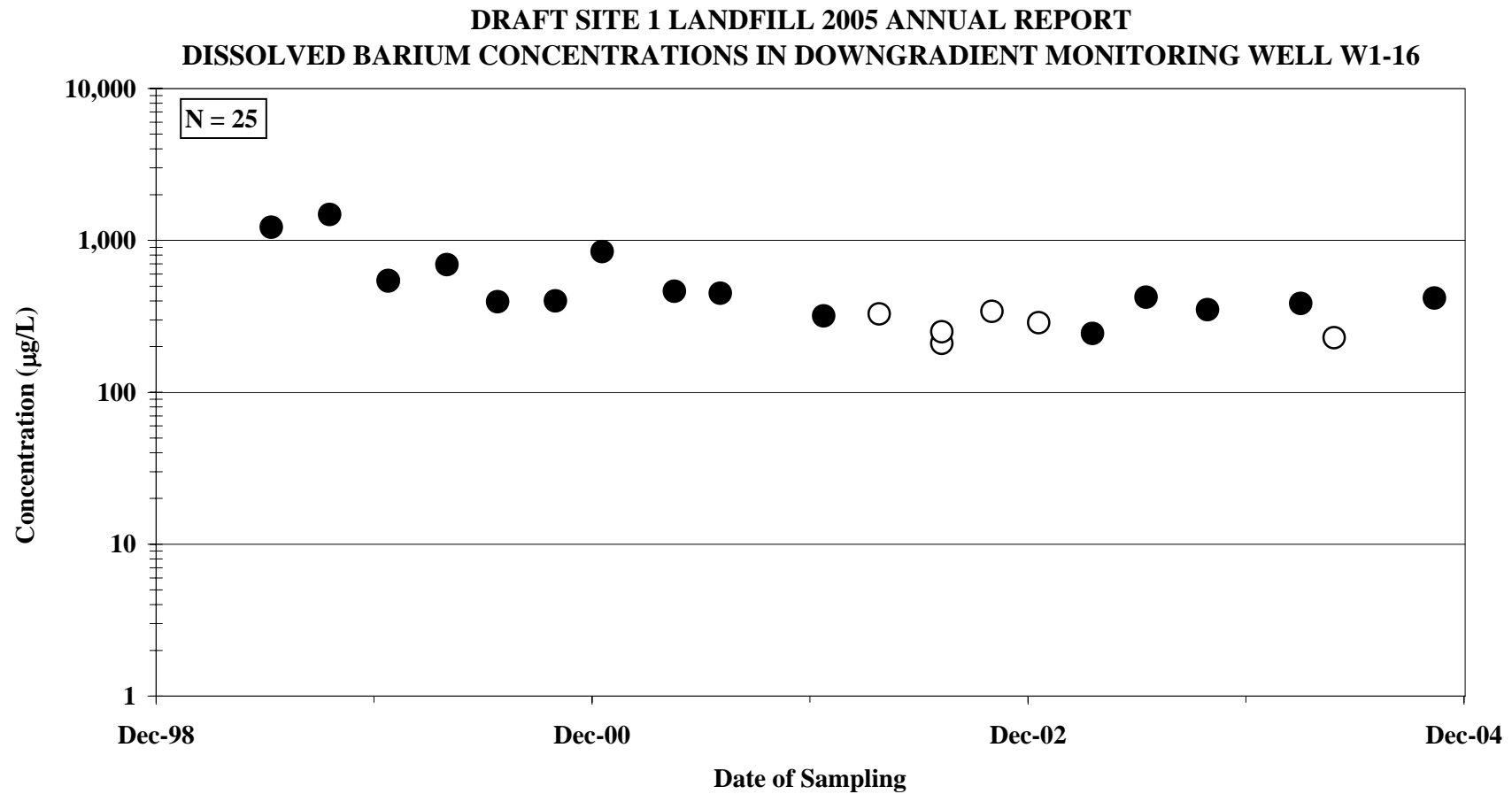


FIGURE E-16



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED BARIUM CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-19

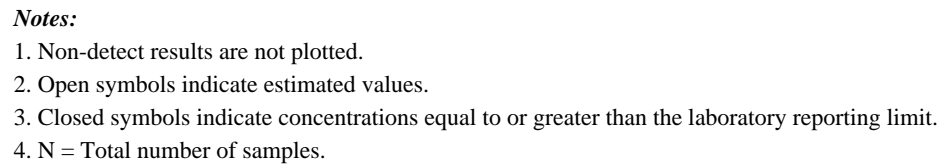
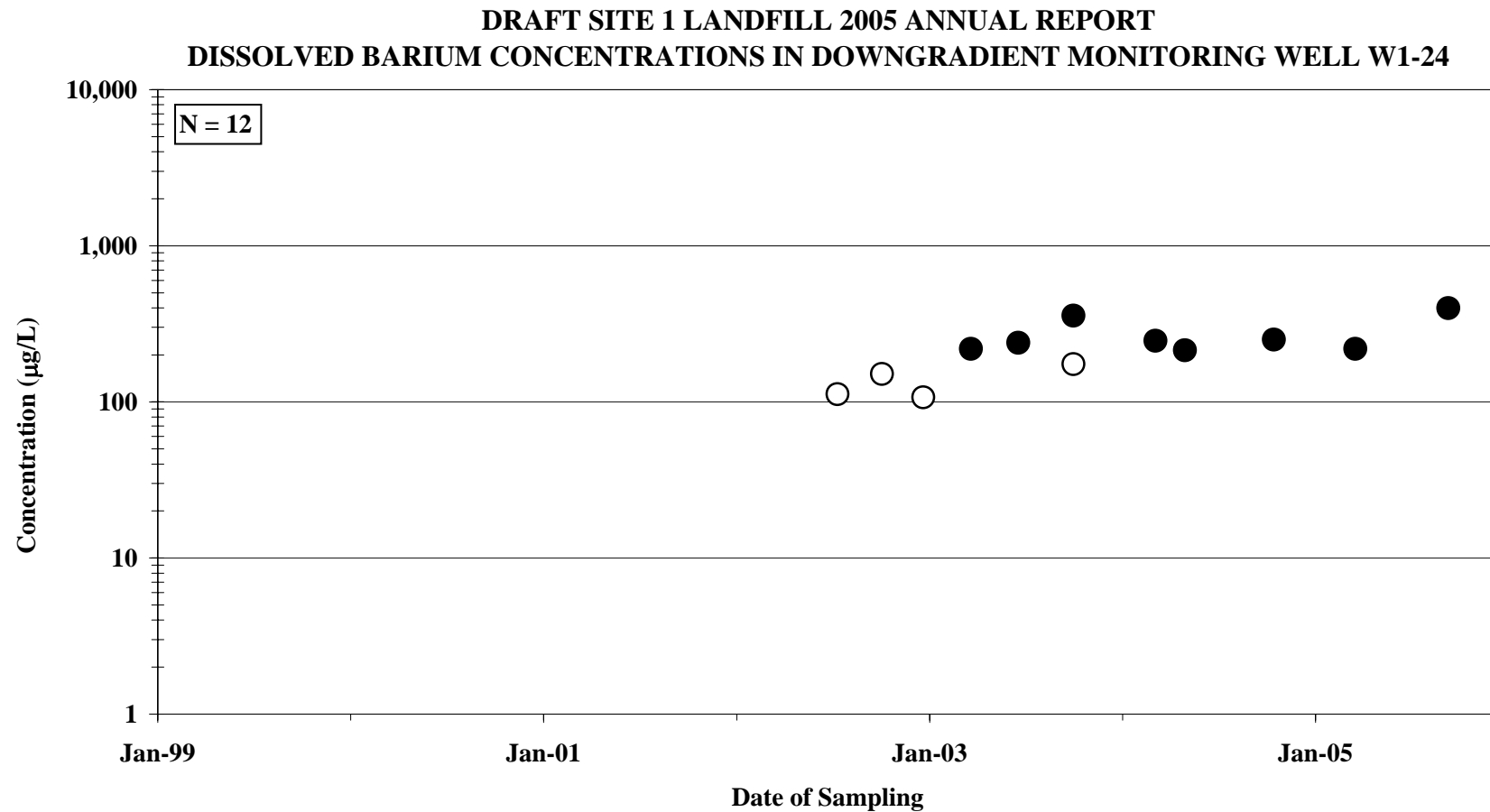


FIGURE E-18

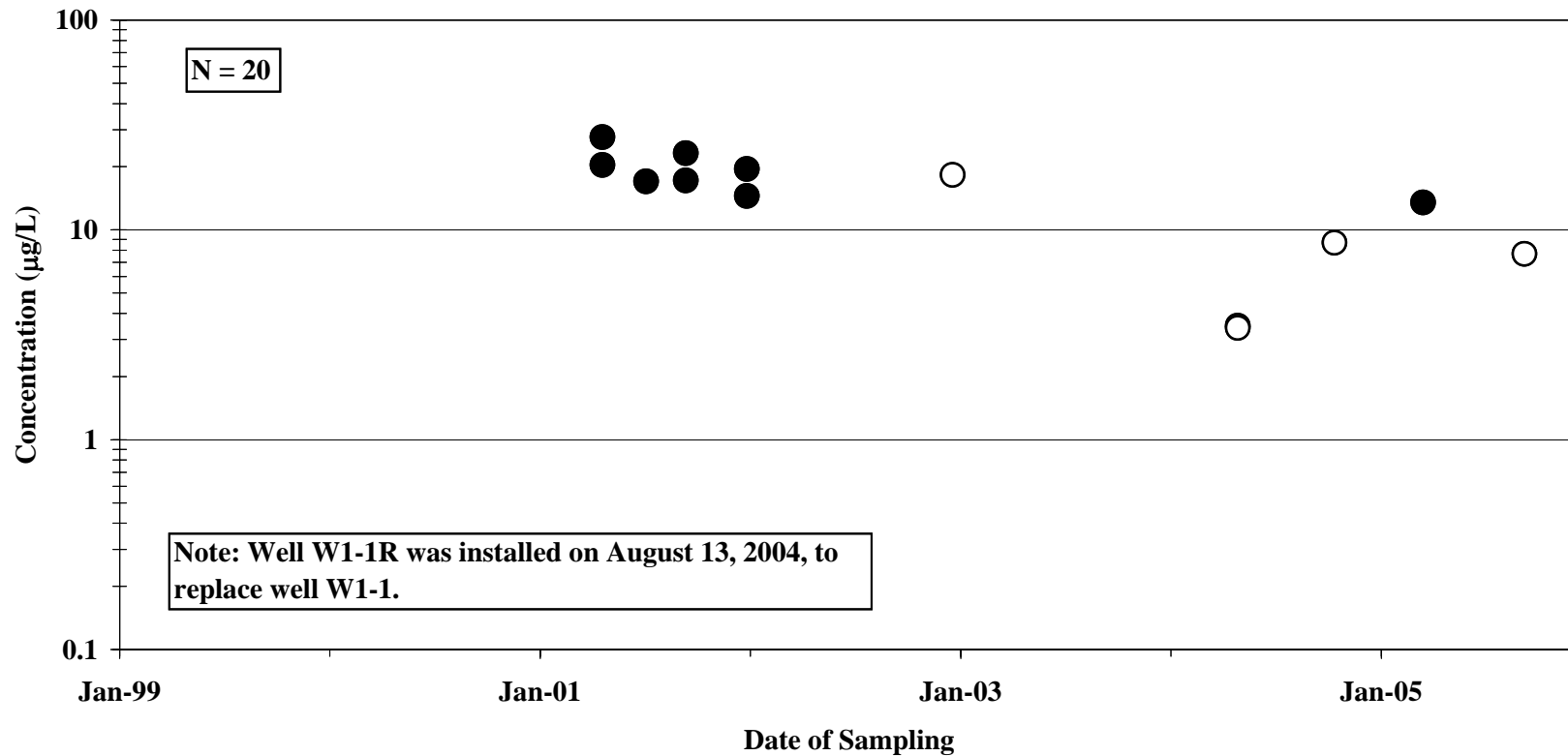


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-19

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-1 / W1-1R**

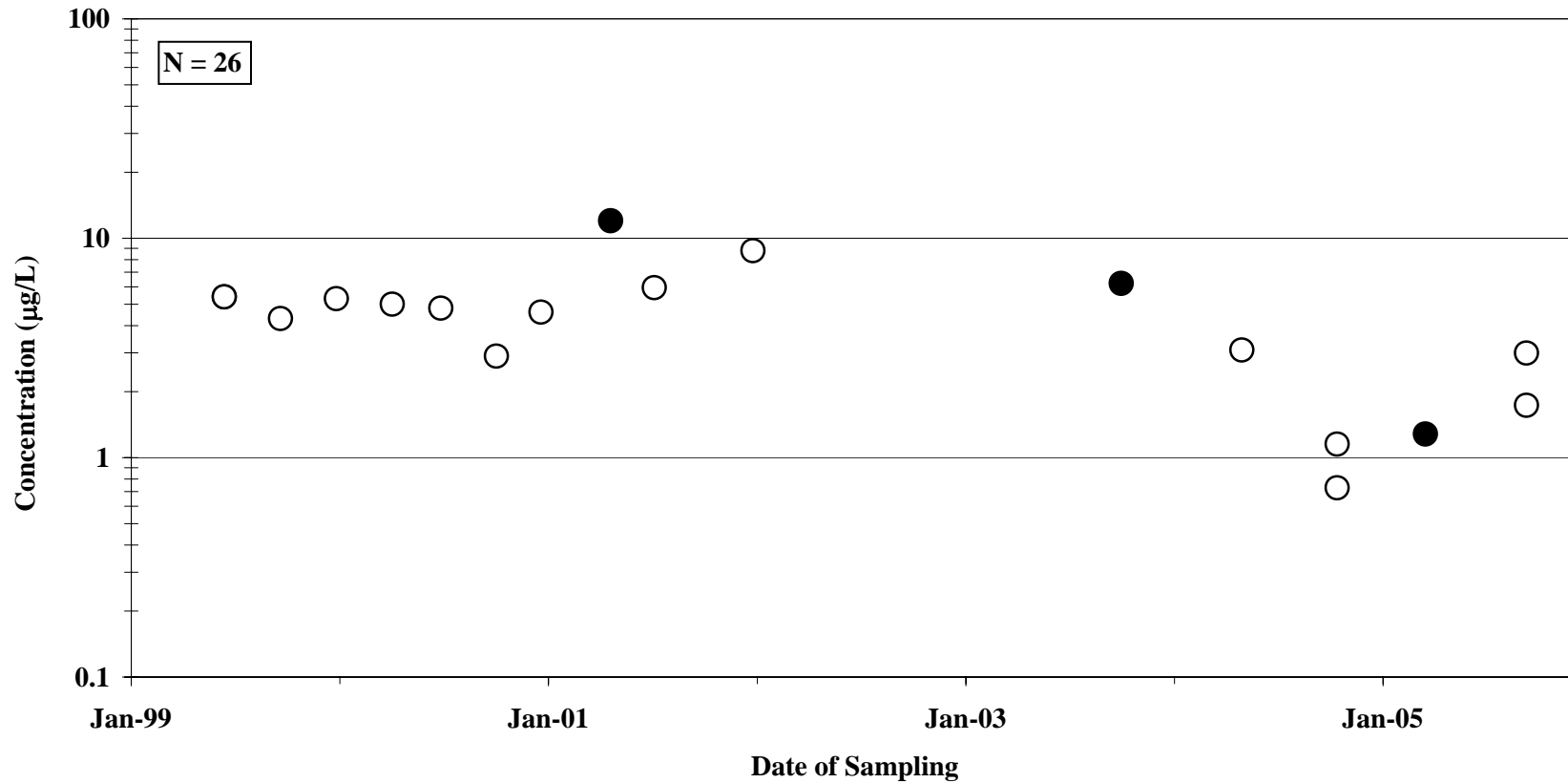


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-20

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-5**

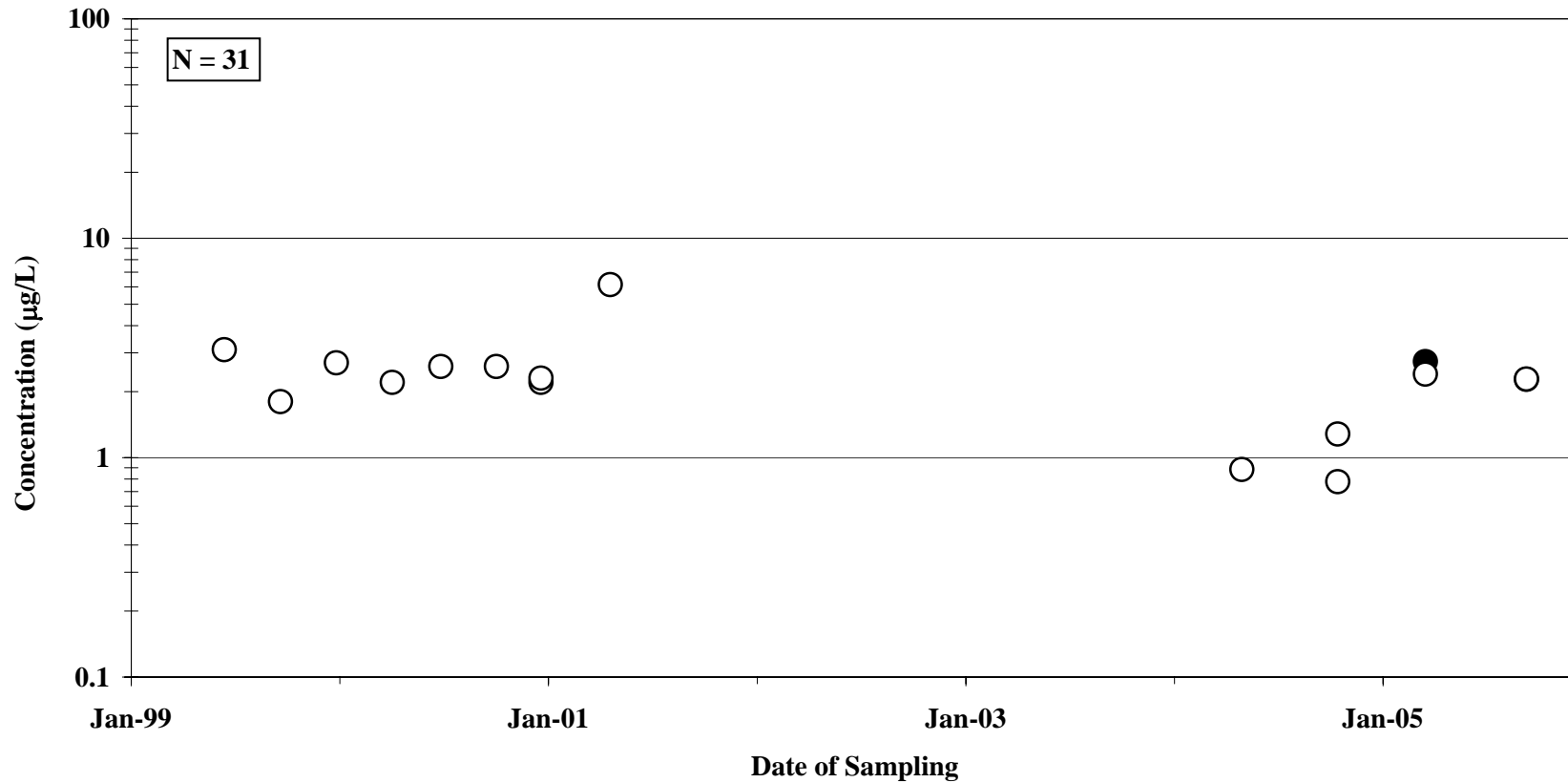


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-21

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-8**

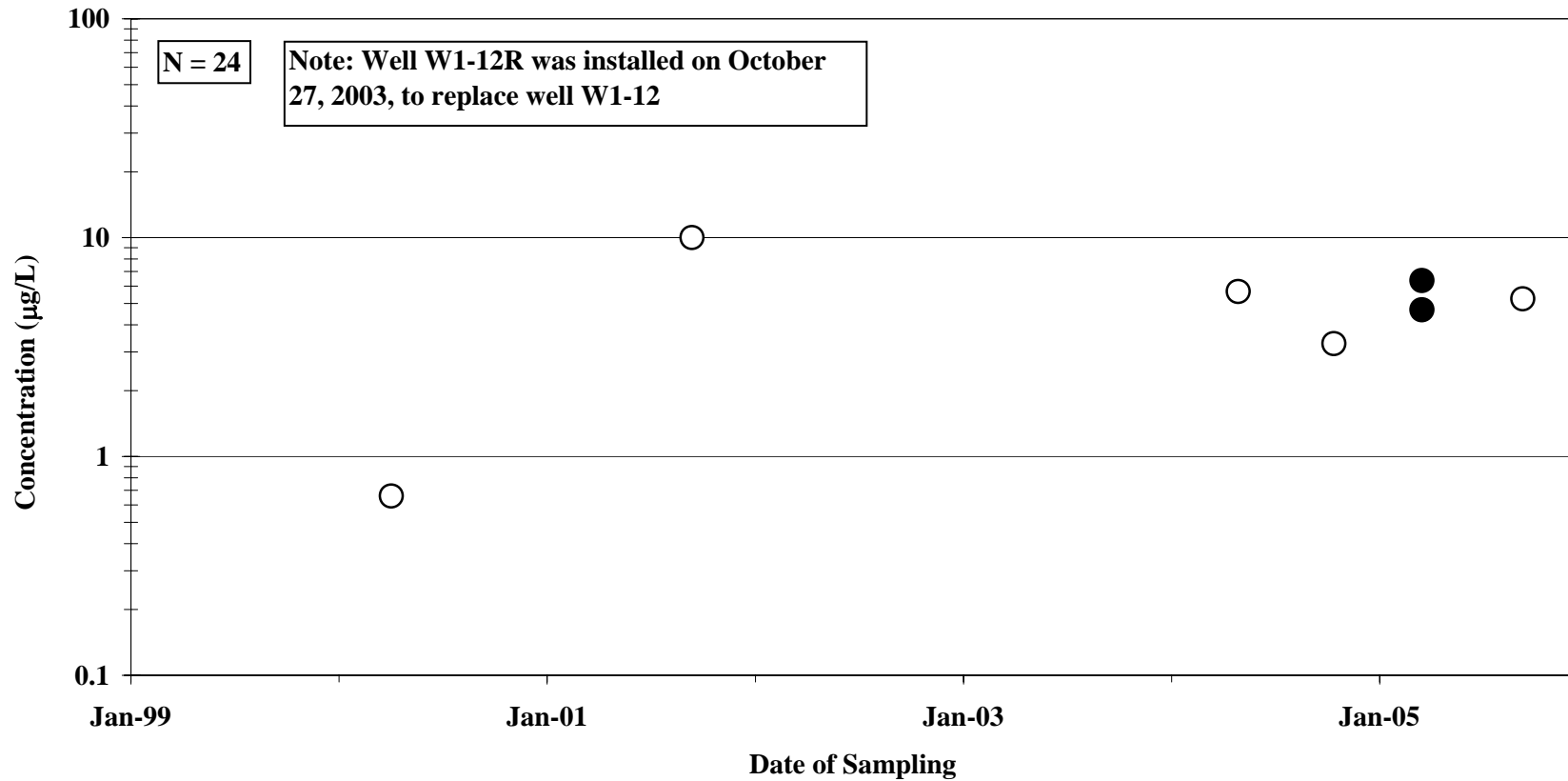


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-22

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-12 / W1-12R**

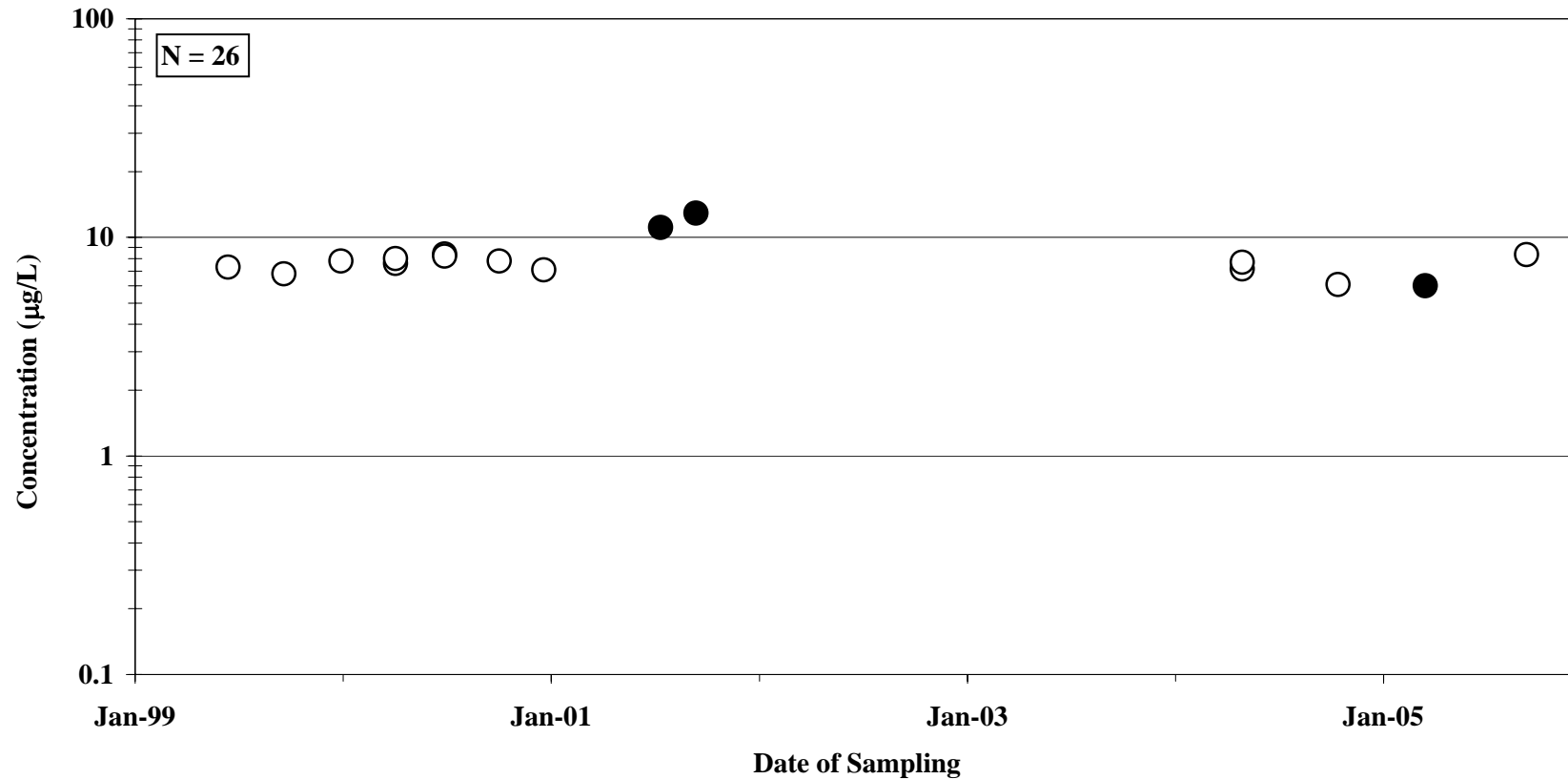


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-23

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-14**

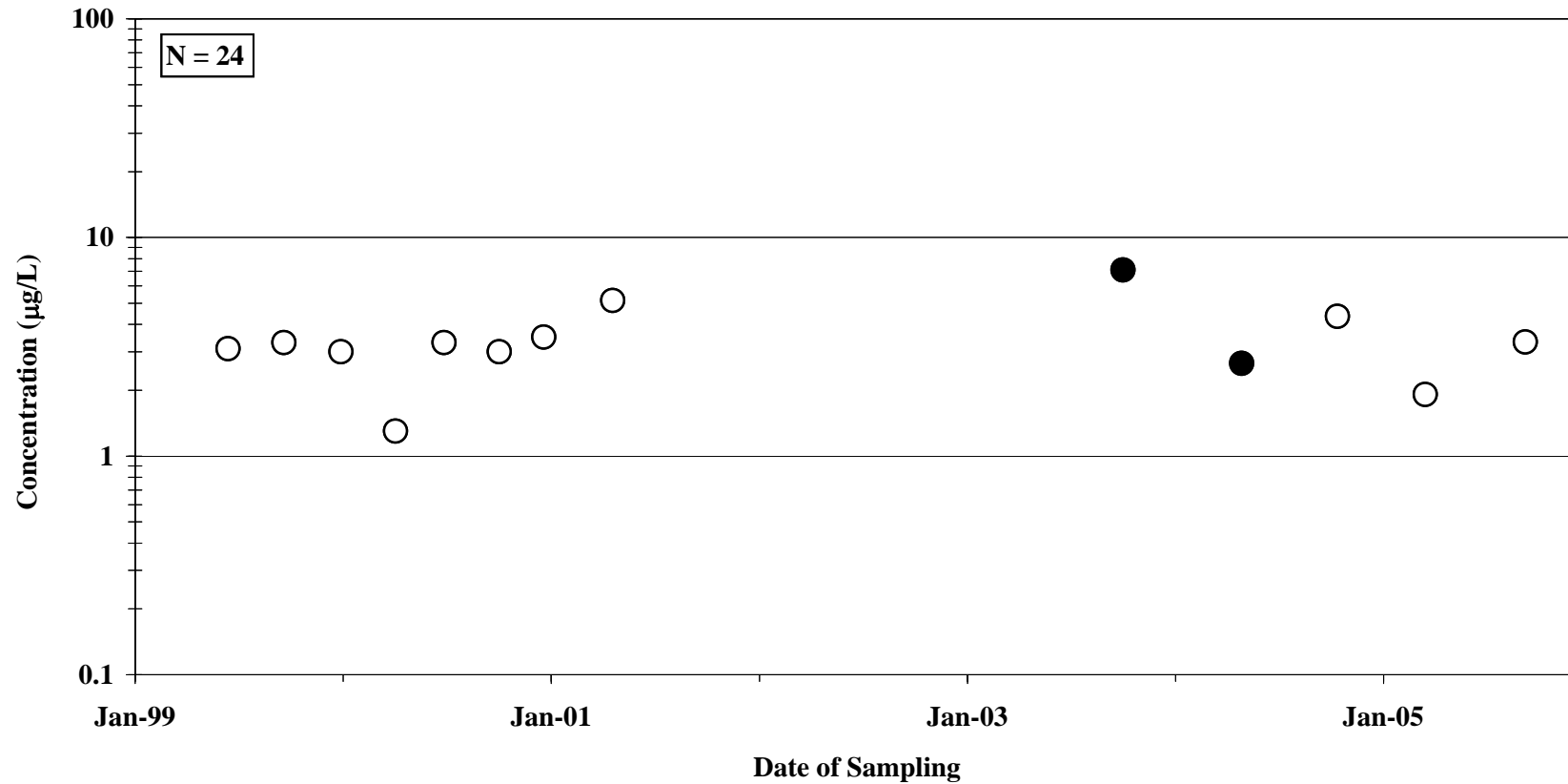


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-24

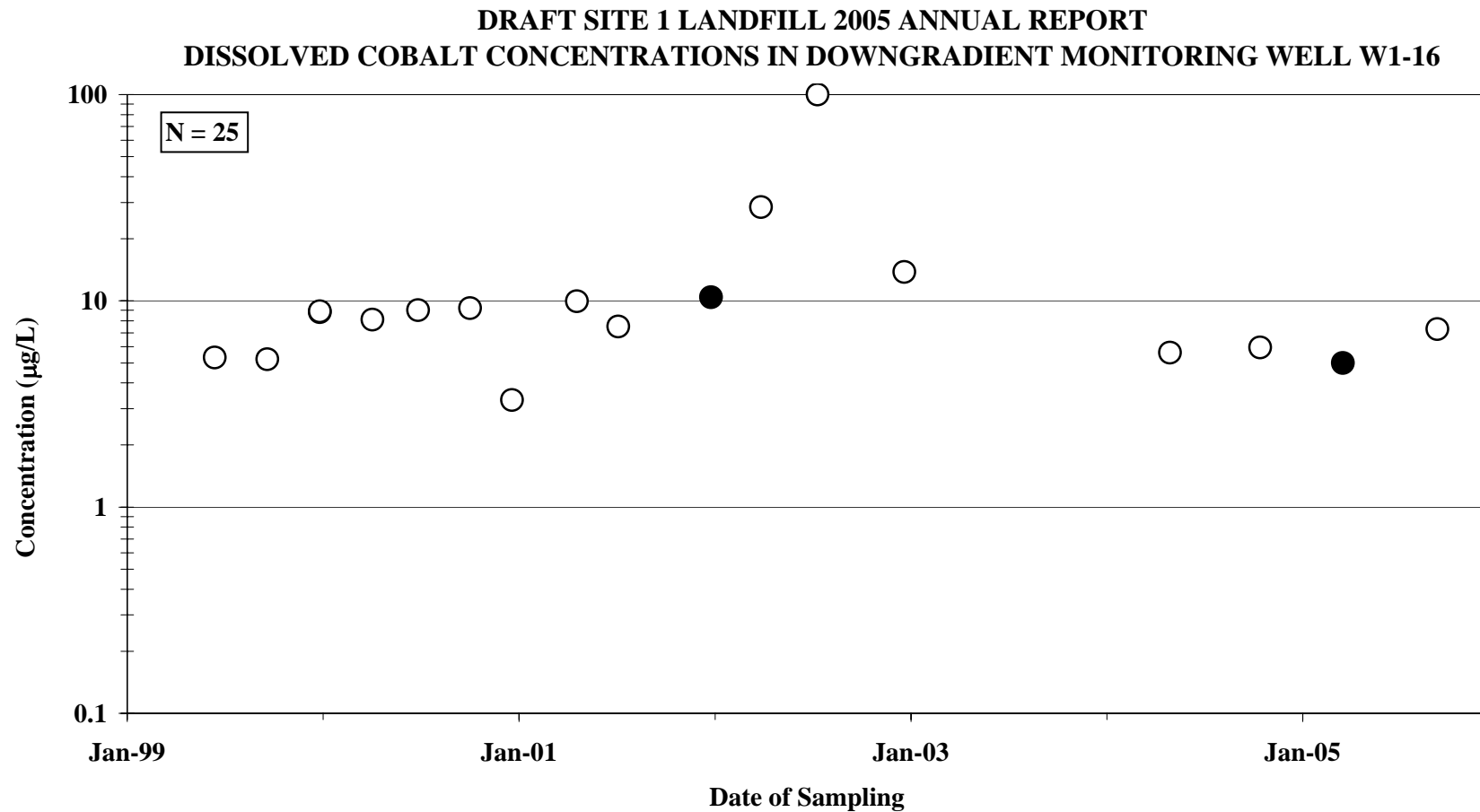
**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-15**



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

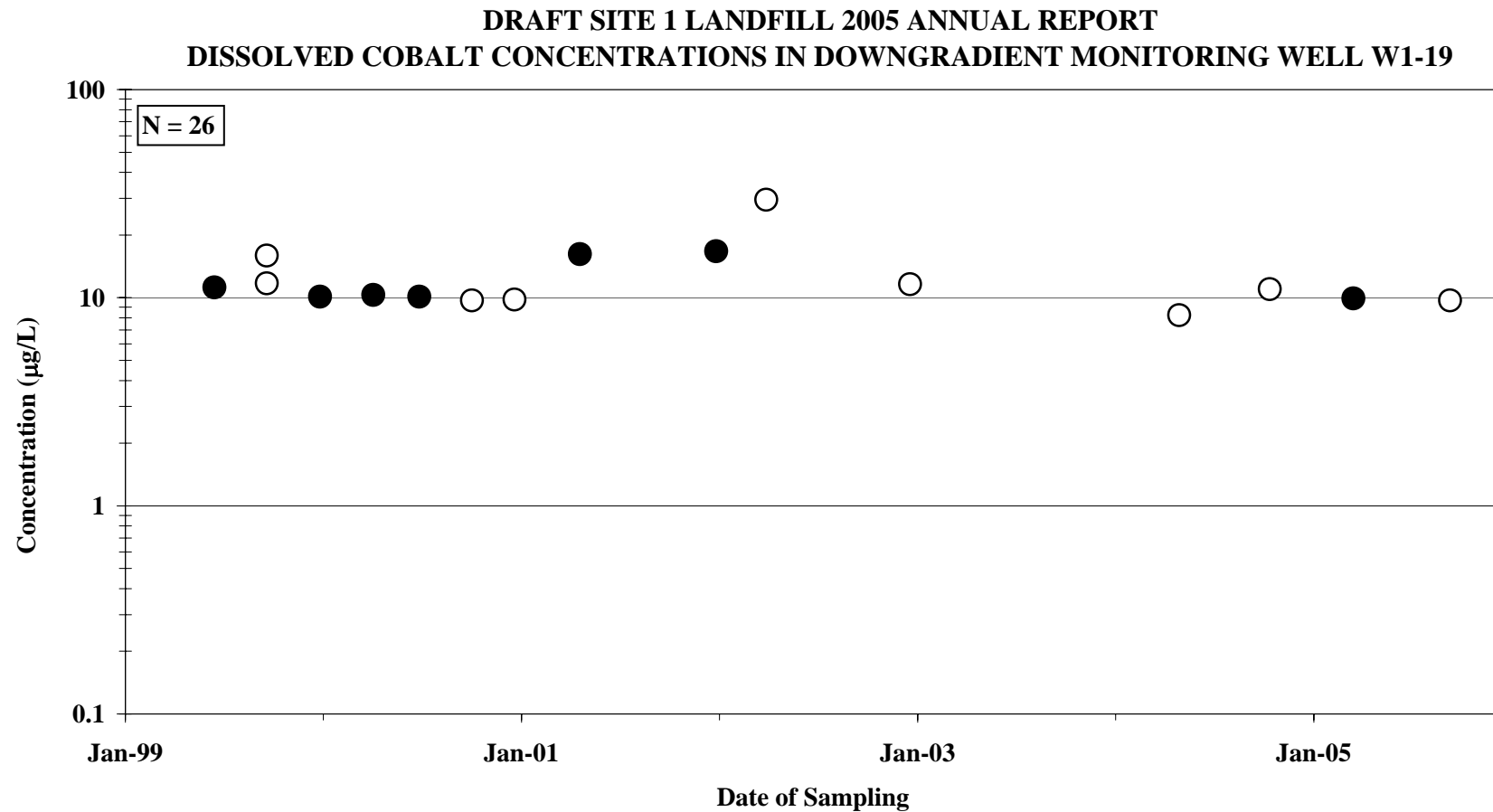
FIGURE E-25



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-26

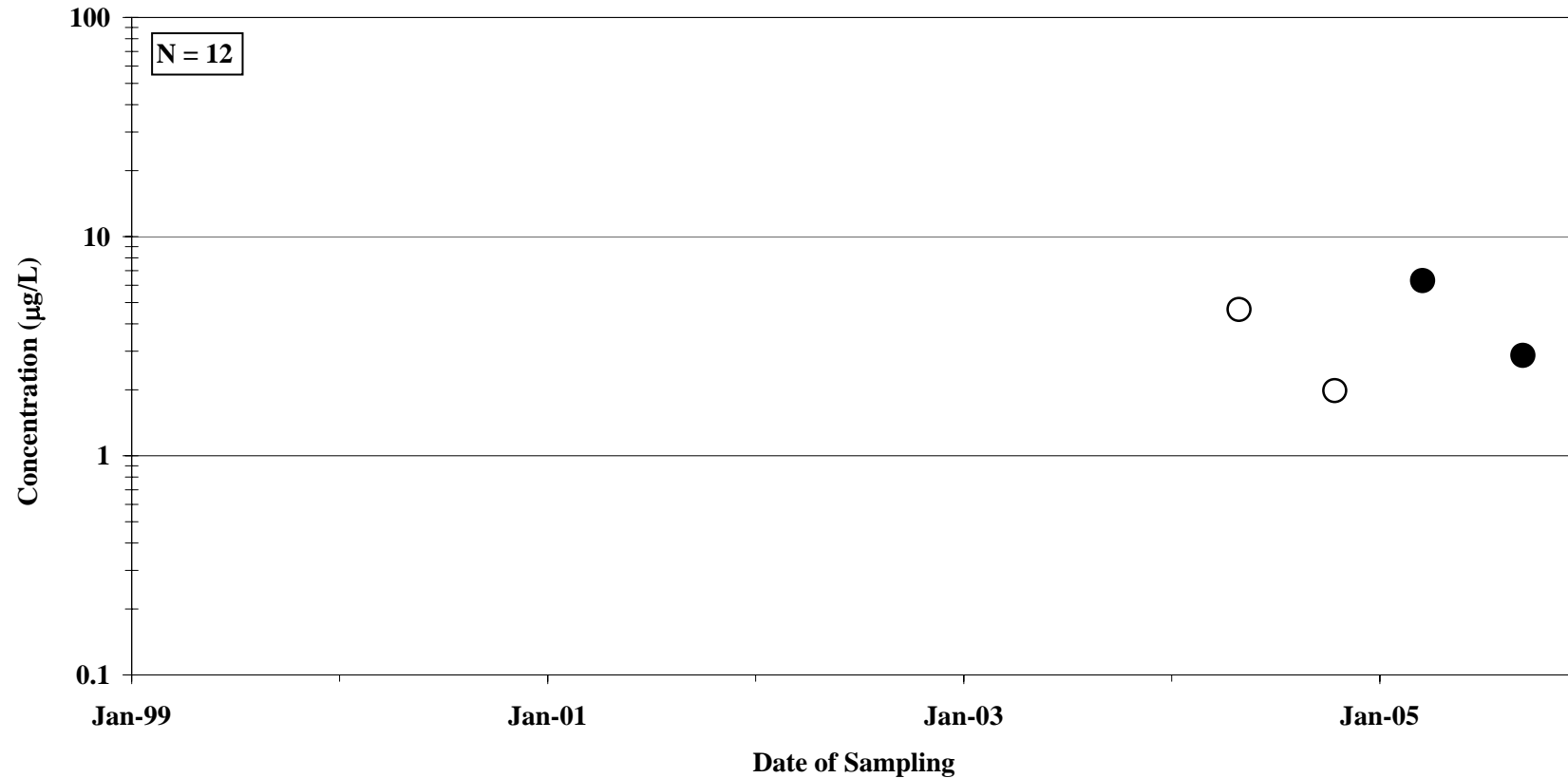


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-27

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COBALT CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-24**

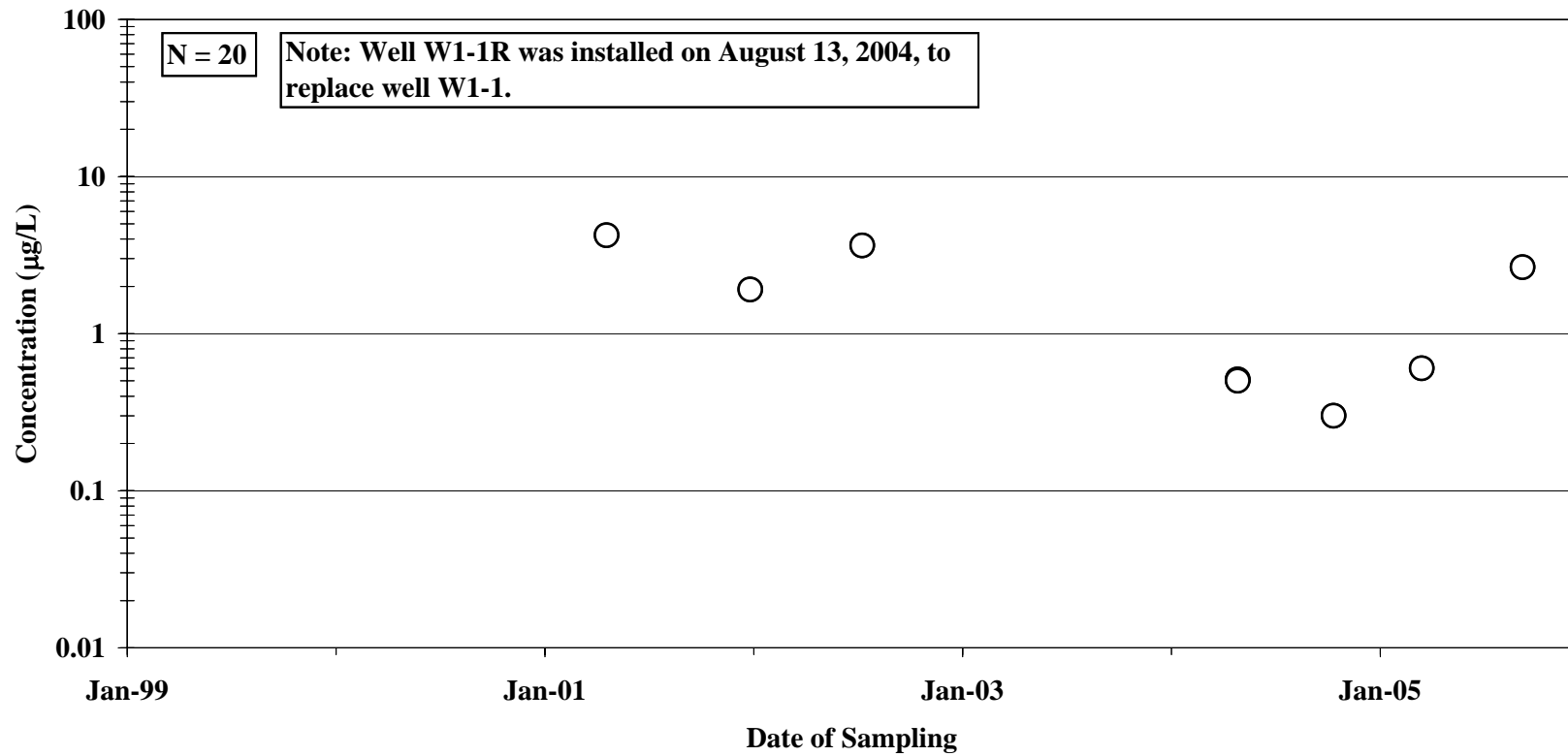


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-28

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN DOWNGRADIENT MONITORING WELL W1-1 / W1-1R**

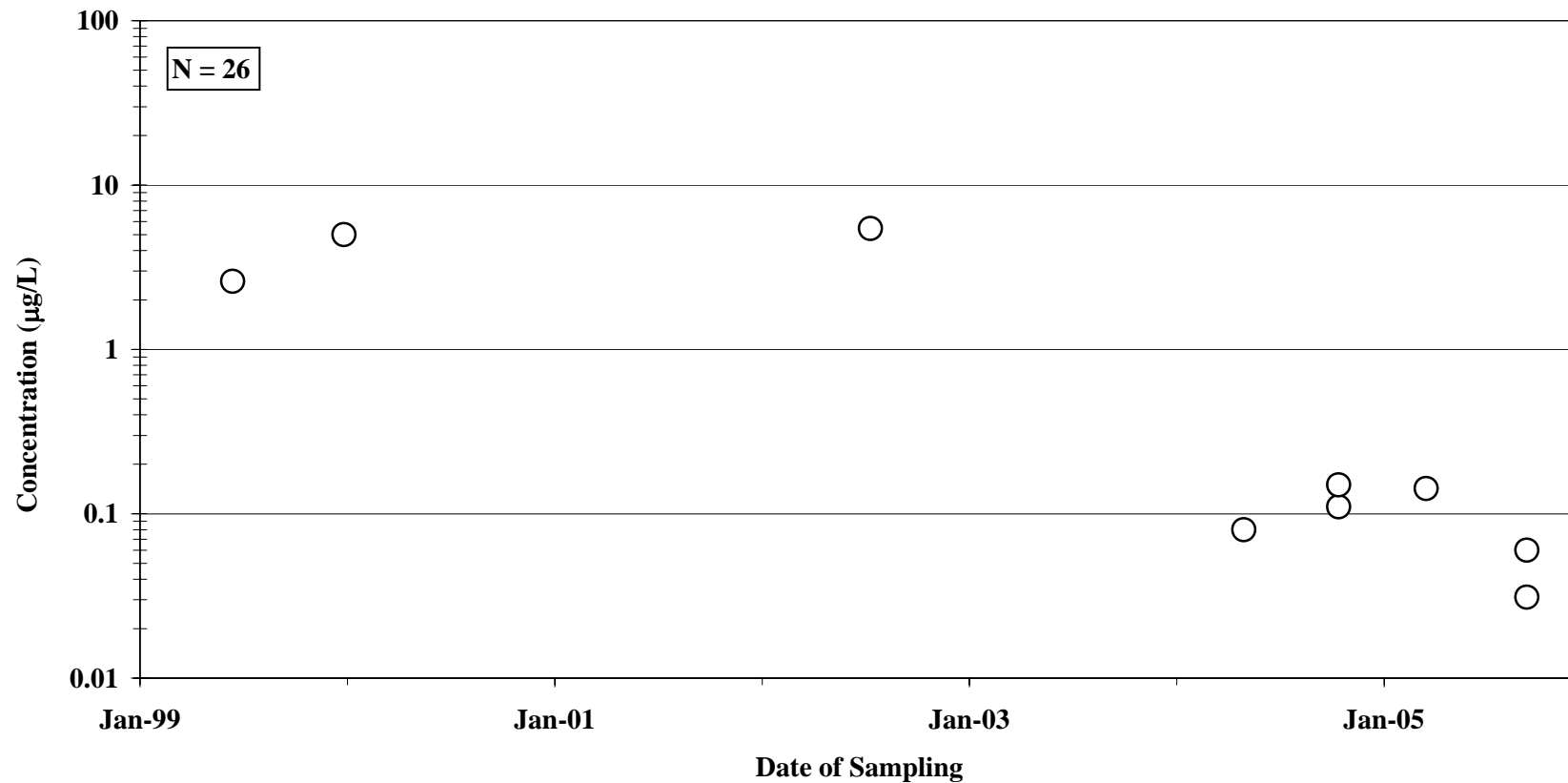


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-29

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-5**

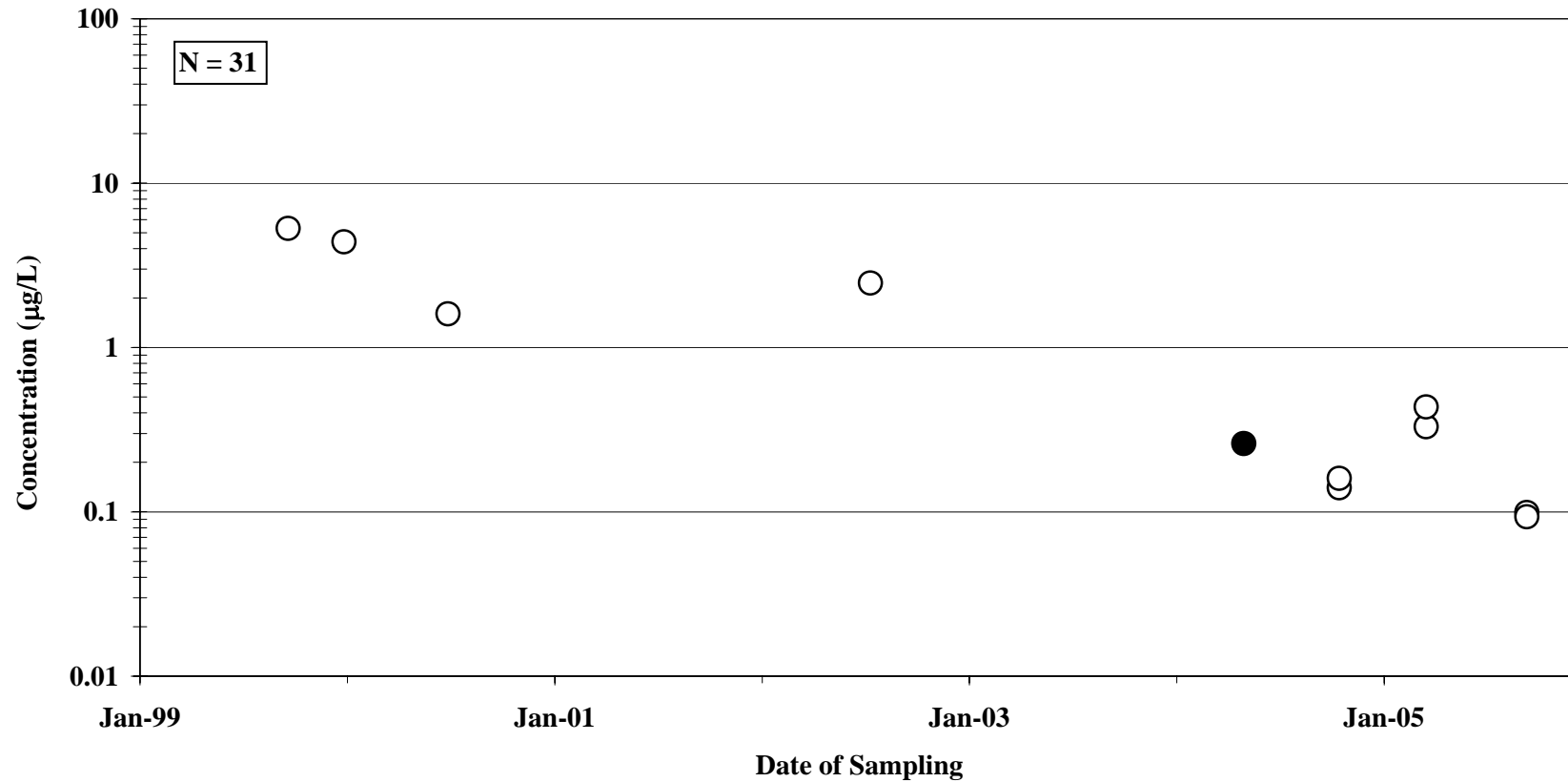


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-30

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-8**

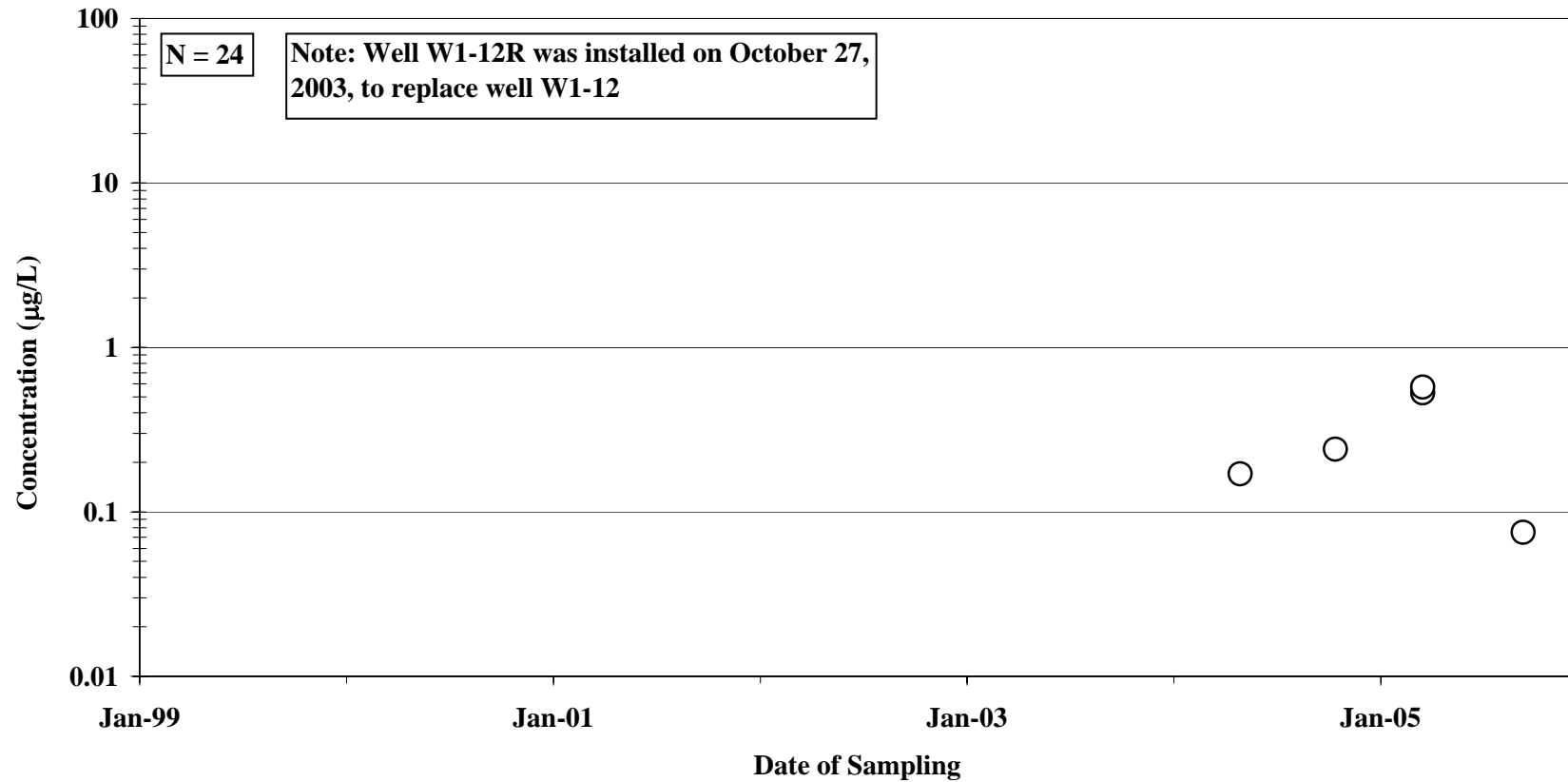


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-31

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN BACKGROUND MONITORING WELL W1-12 / W1-12R**

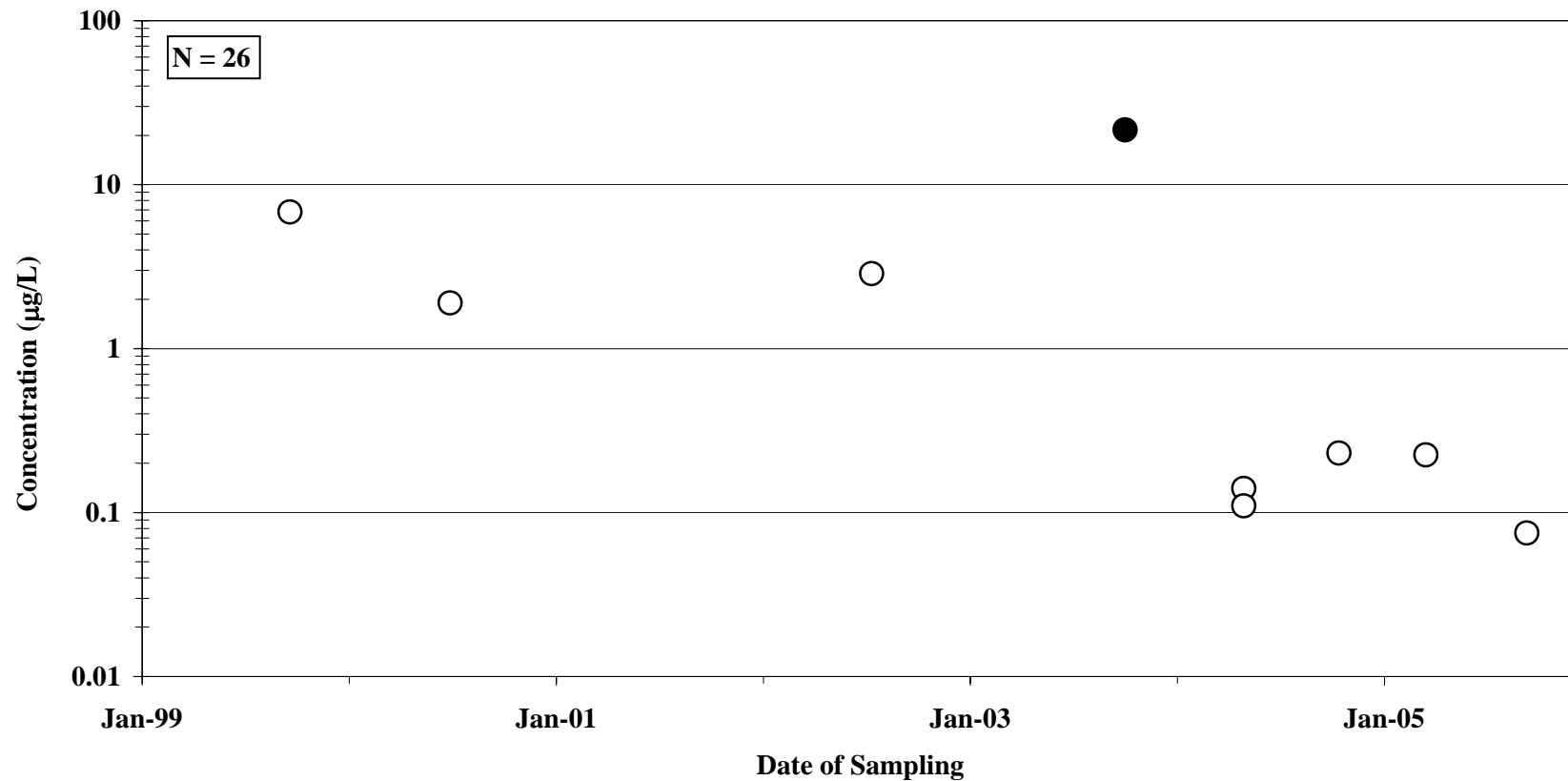


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-32

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-14**

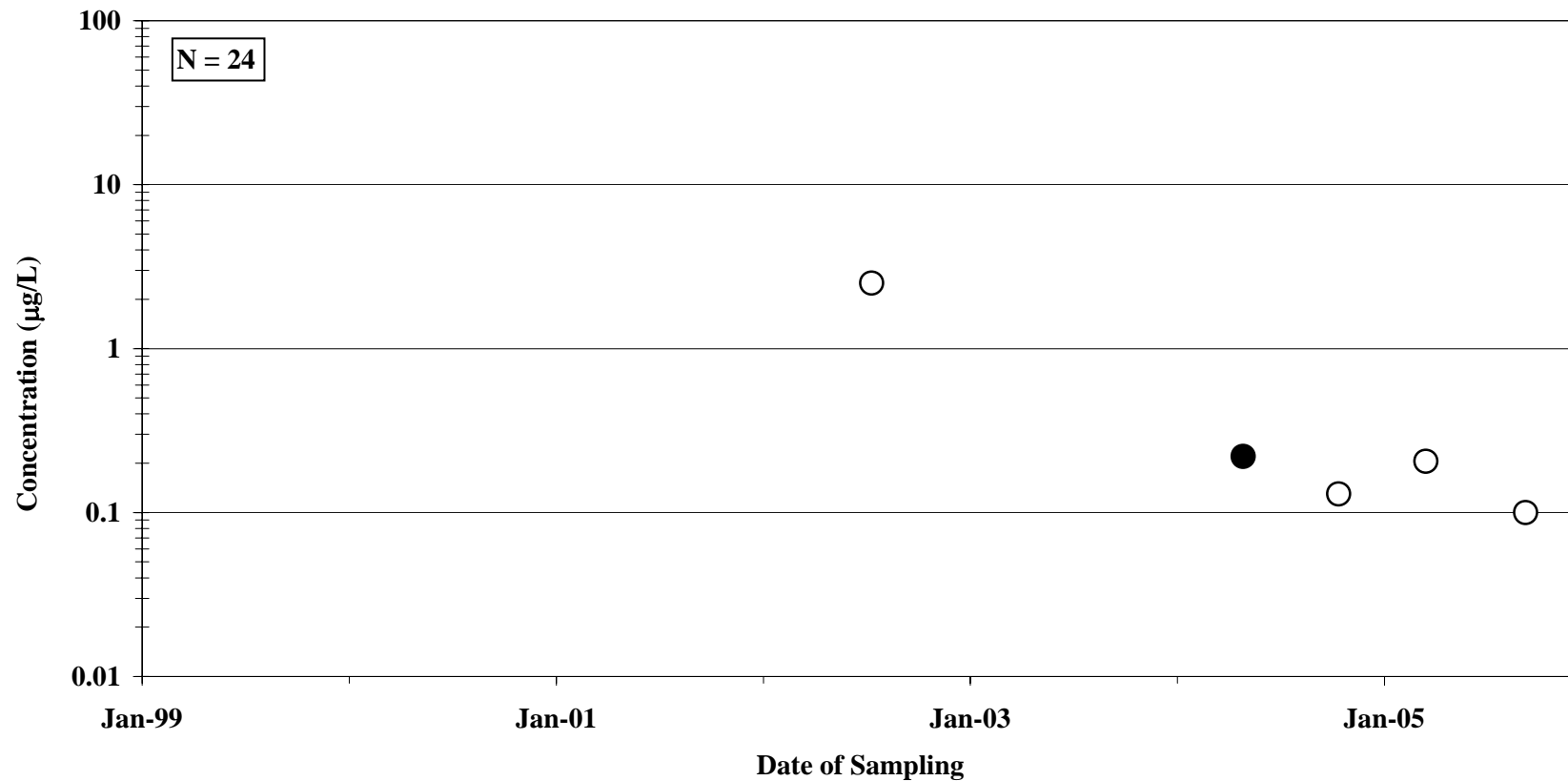


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-33

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-15**

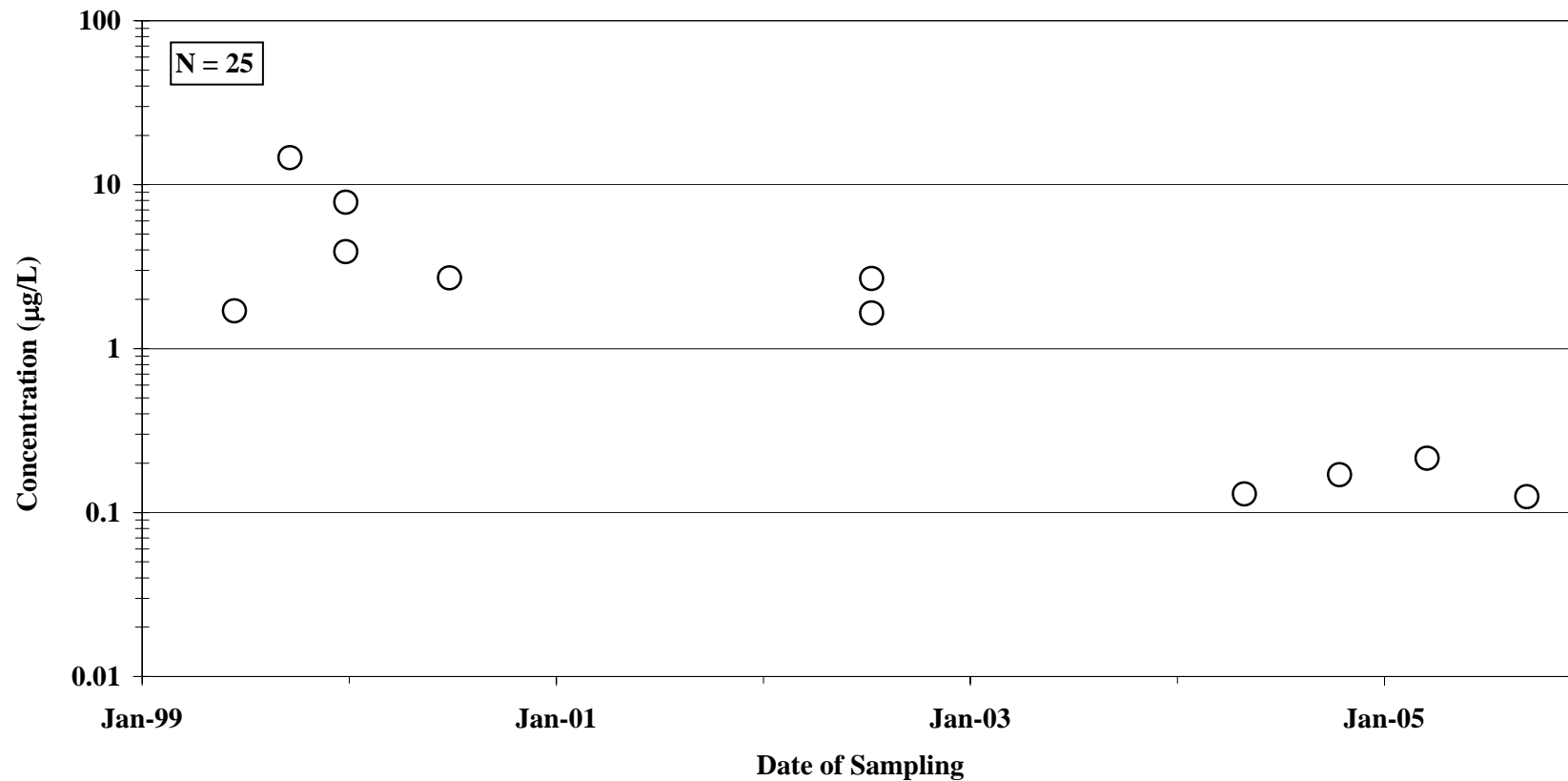


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-34

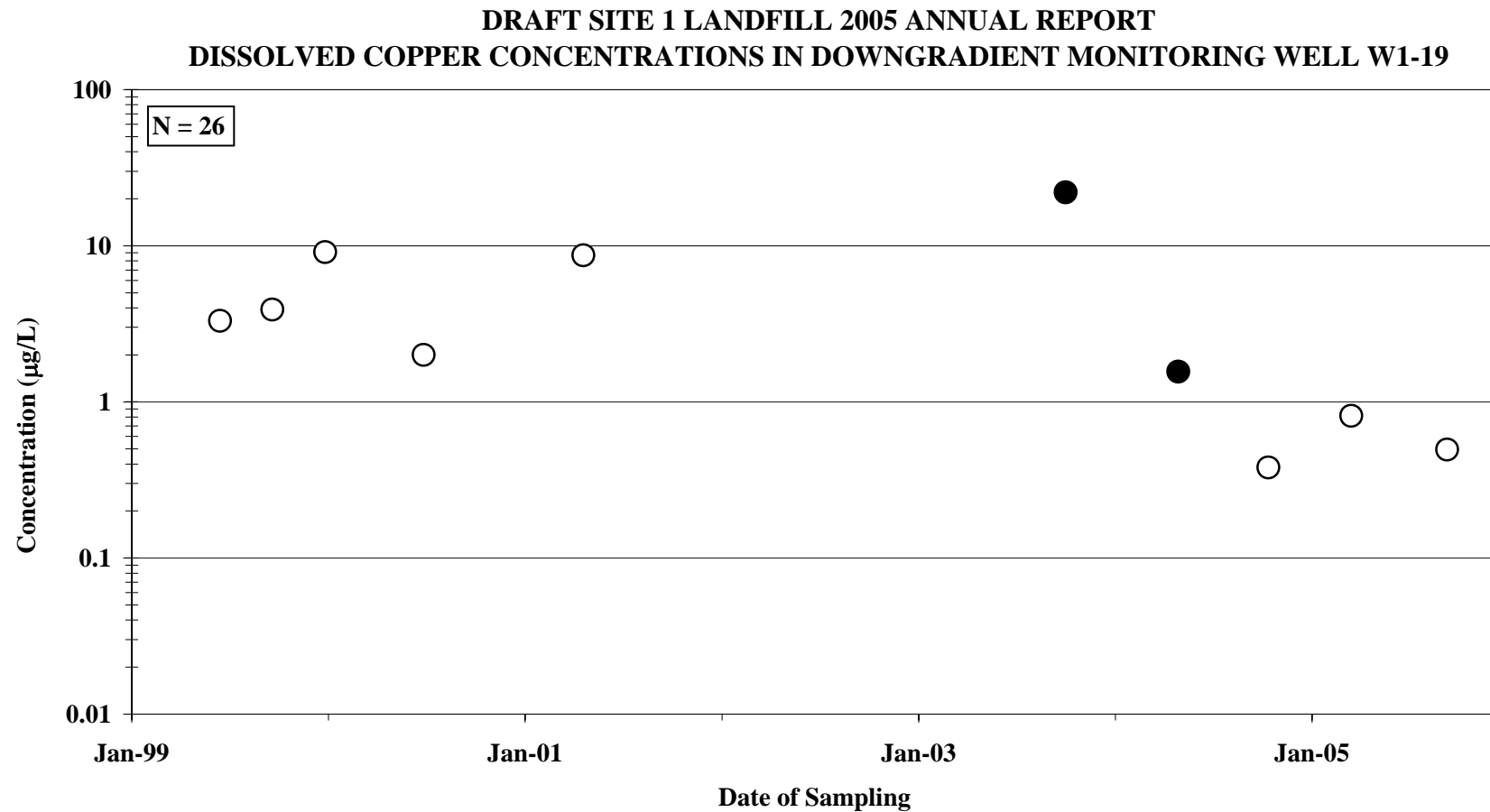
**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN DOWNGRAIDENT MONITORING WELL W1-16**



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-35

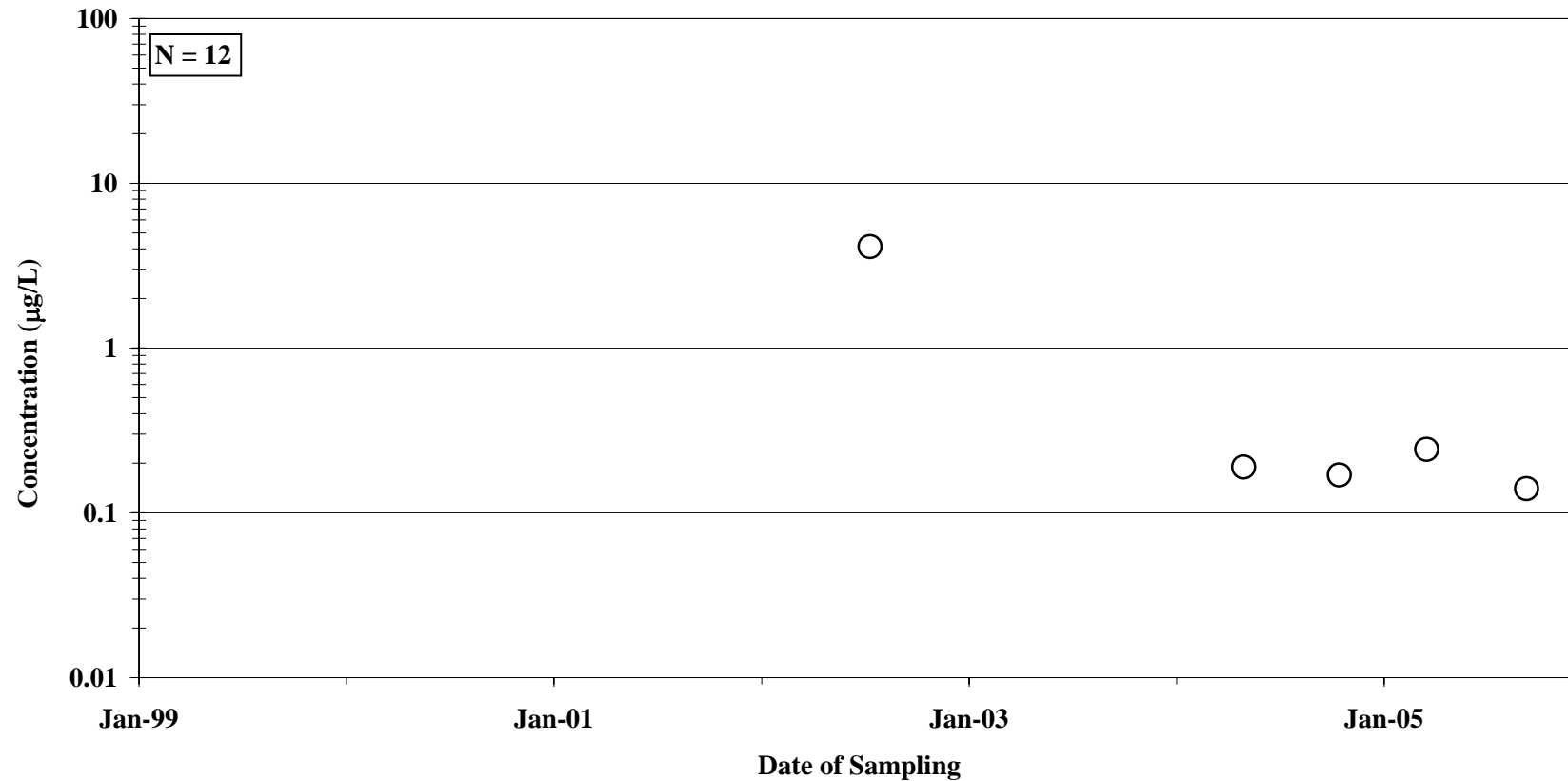


Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

FIGURE E-36

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
DISSOLVED COPPER CONCENTRATIONS IN DOWNGRADIENT MONITORING WELL W1-24**



Notes:

1. Non-detect results are not plotted.
2. Open symbols indicate estimated values.
3. Closed symbols indicate concentrations equal to or greater than the laboratory reporting limit.
4. N = Total number of samples.

APPENDIX F

METHANE MONITORING DATA GRAPHS

FIGURE F-1

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-1**

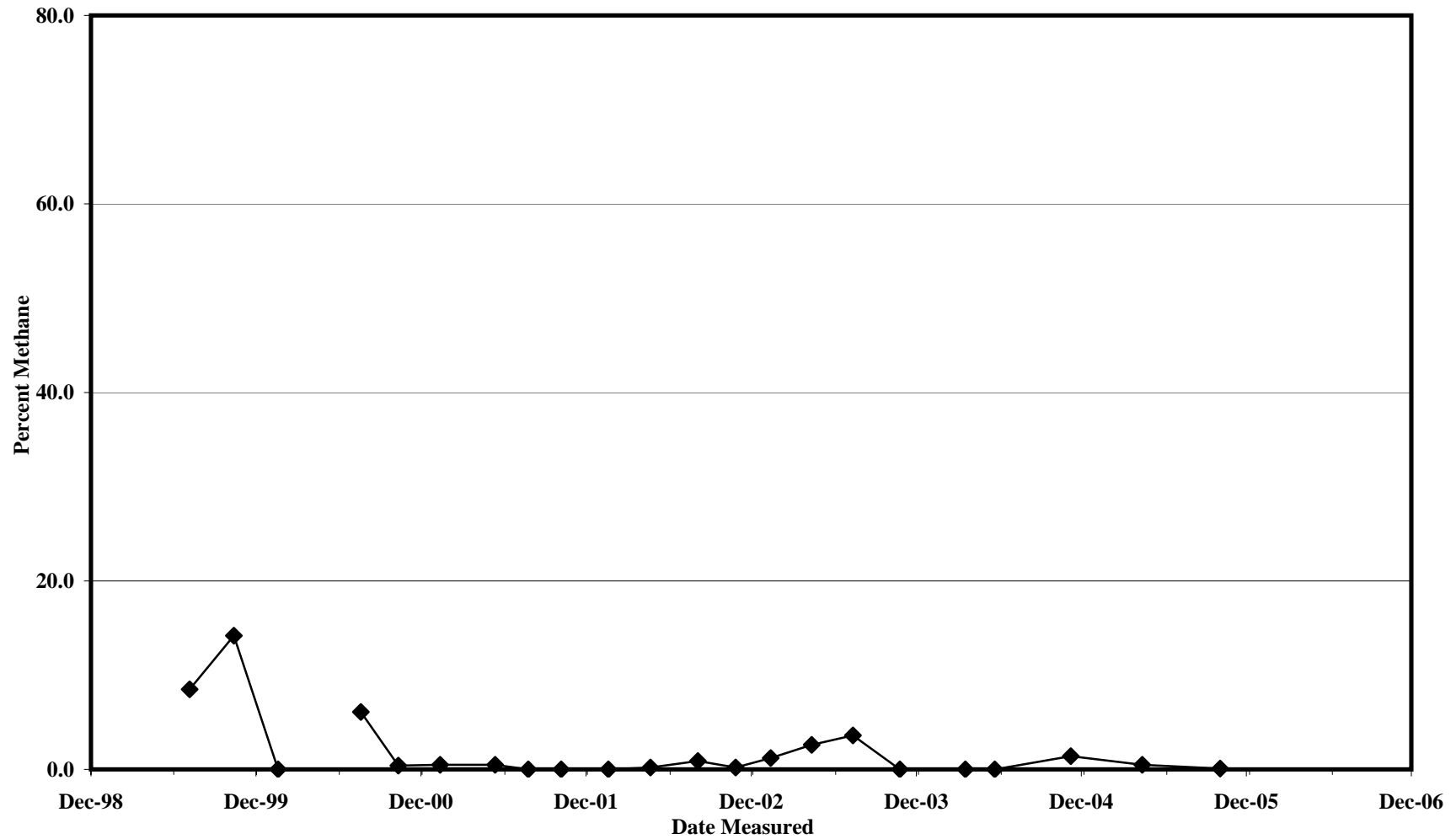


FIGURE F-2

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-2**

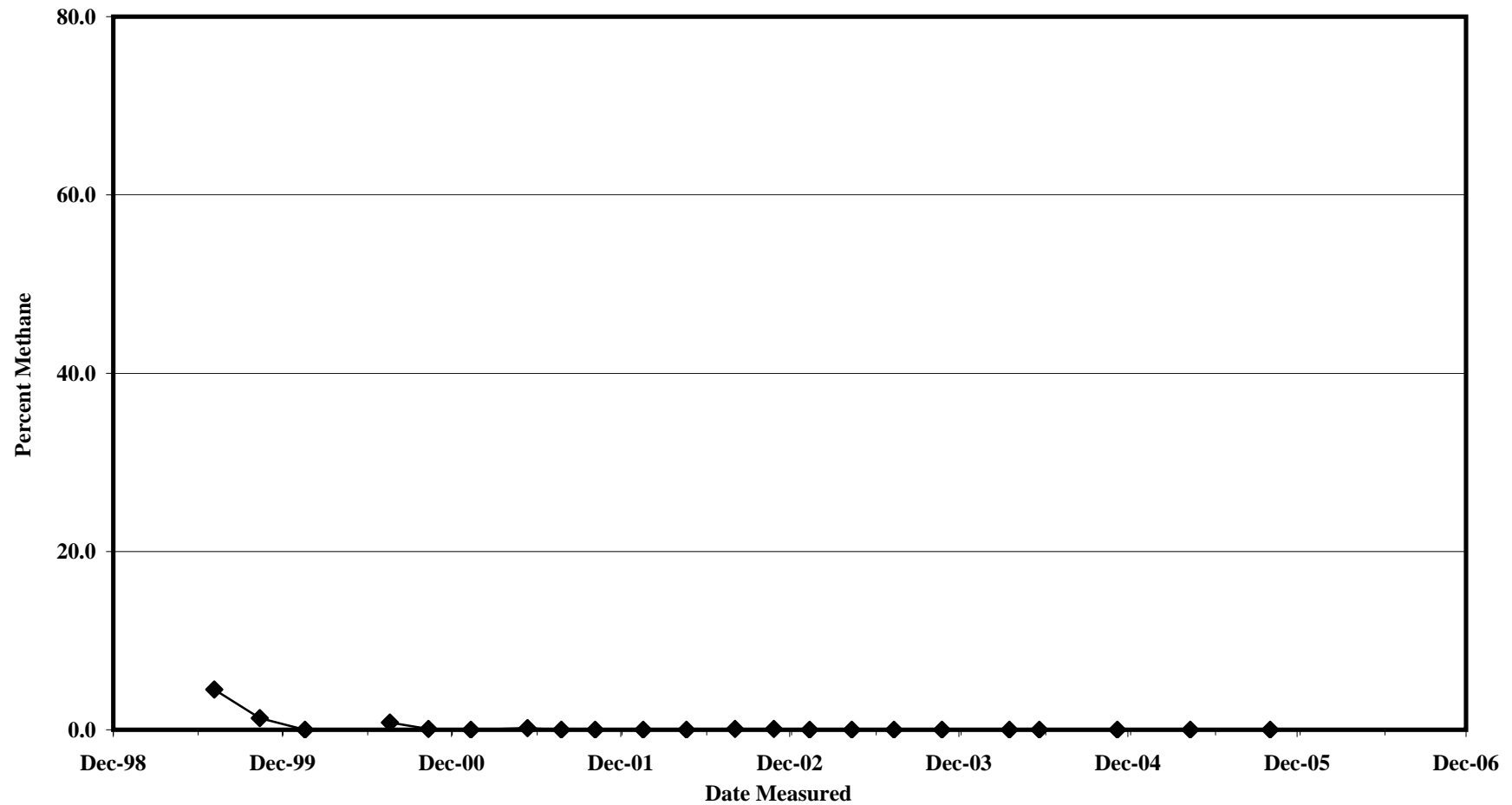


FIGURE F-3

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-3**

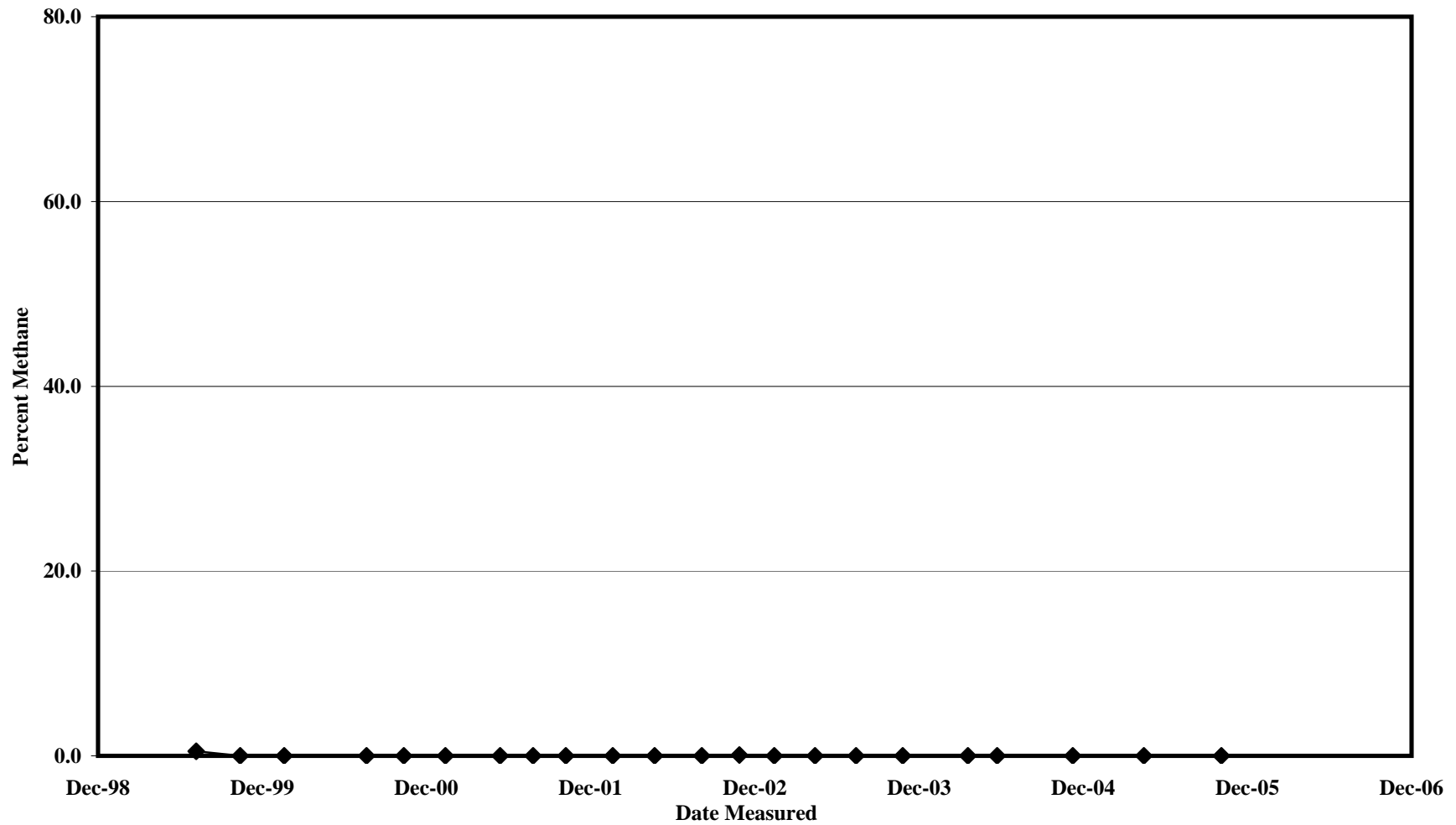


FIGURE F-4

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-4**

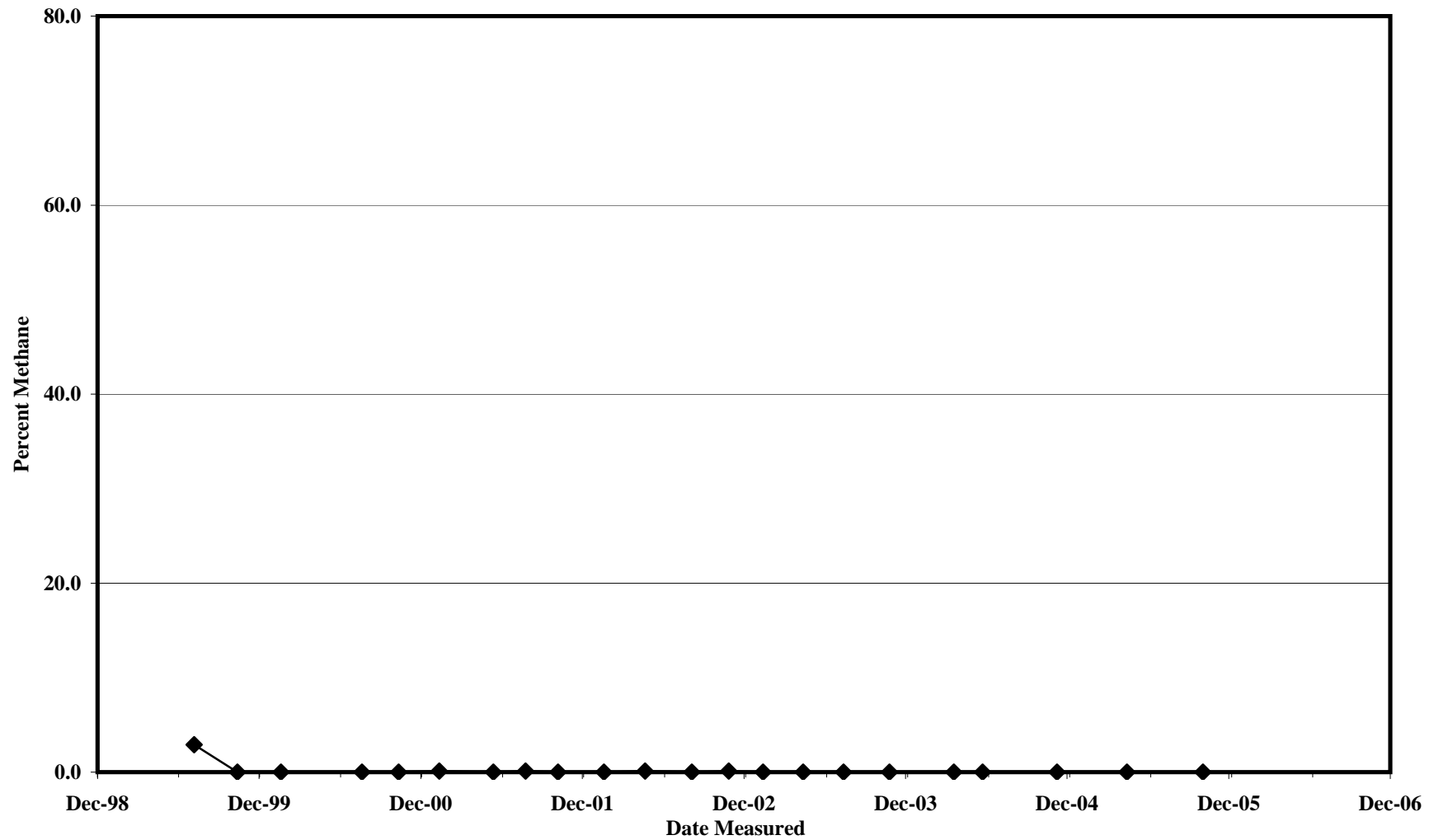


FIGURE F-5

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-5**

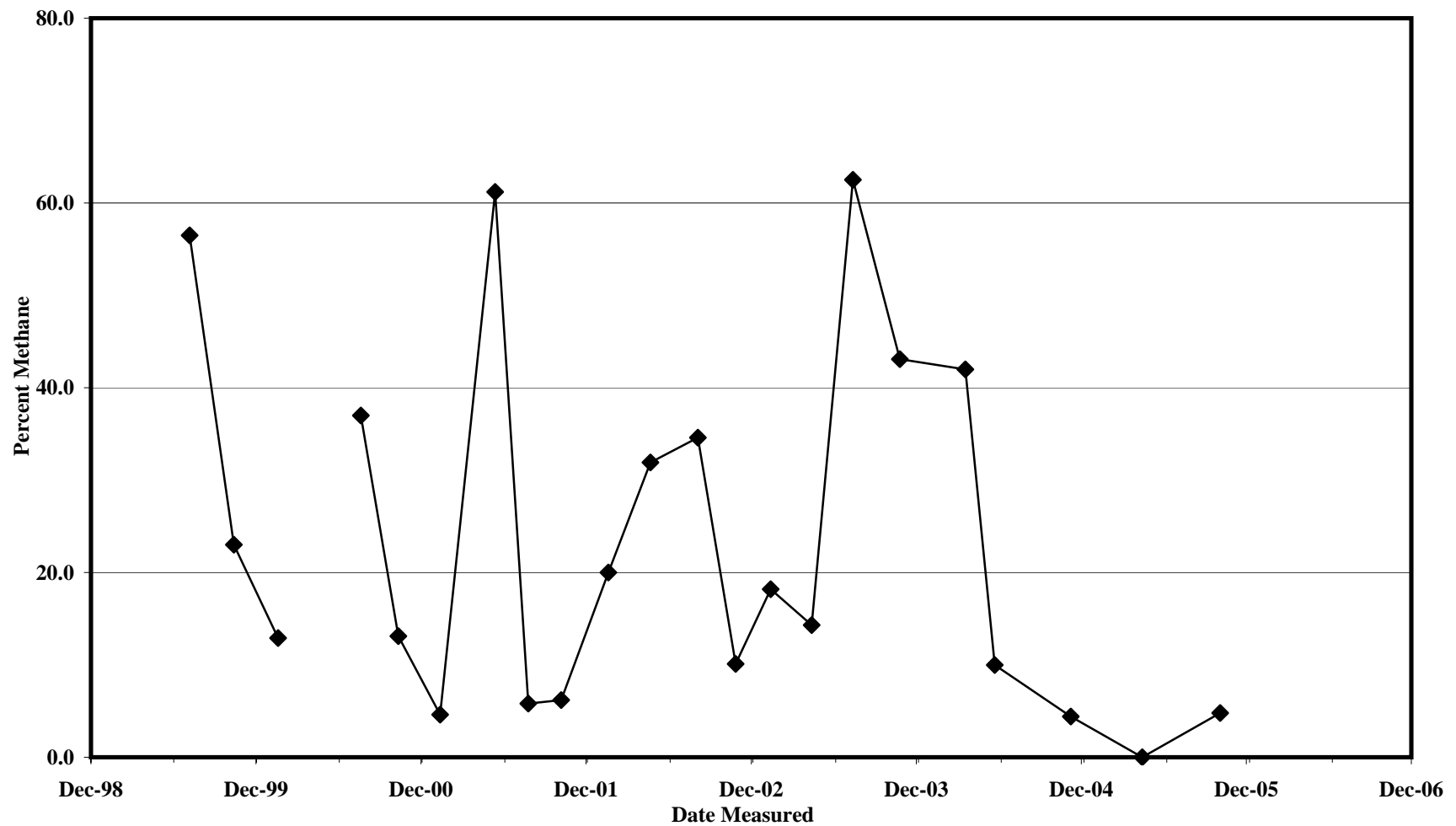


FIGURE F-6

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-6**

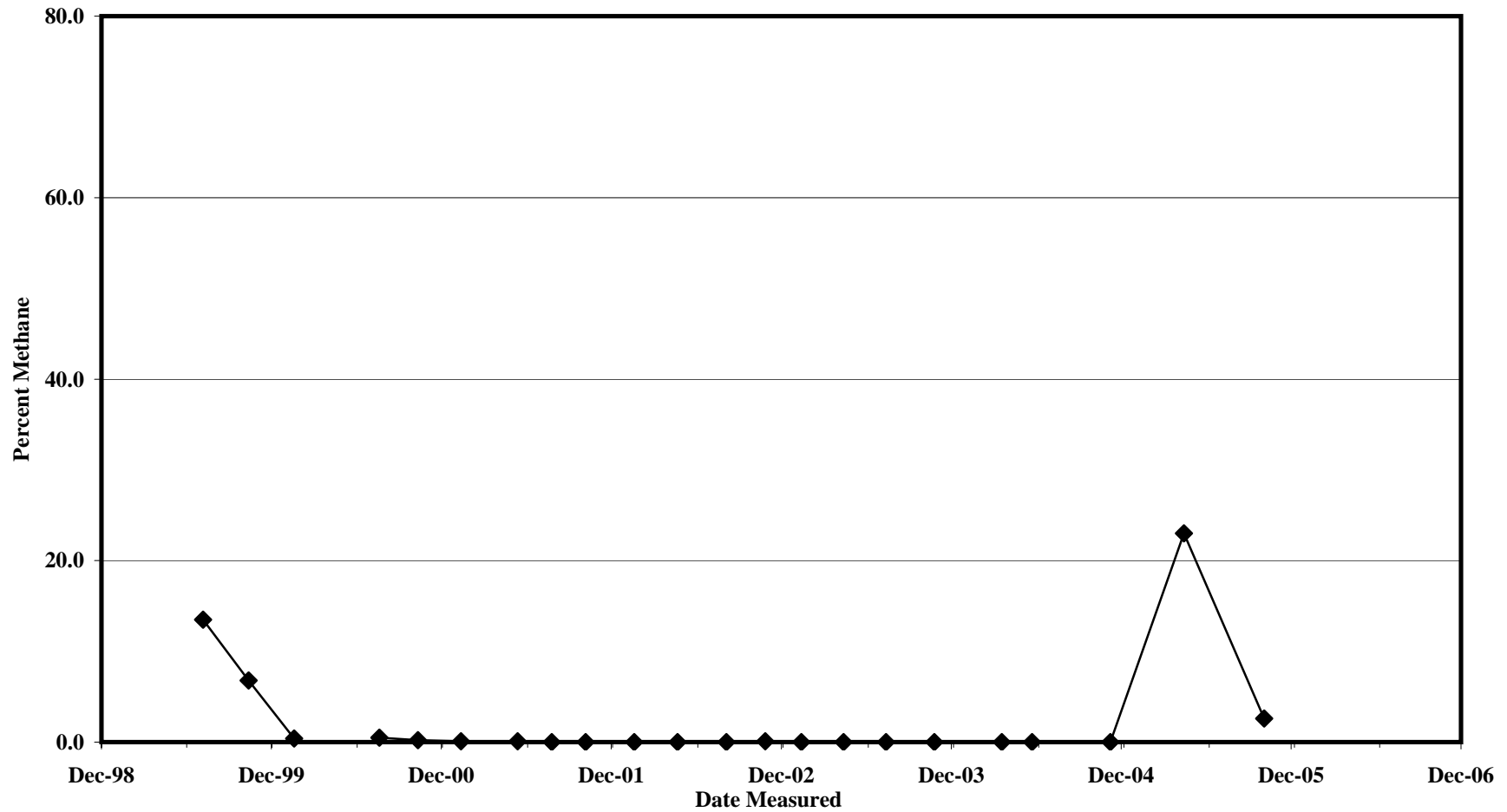


FIGURE F-7

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-7**

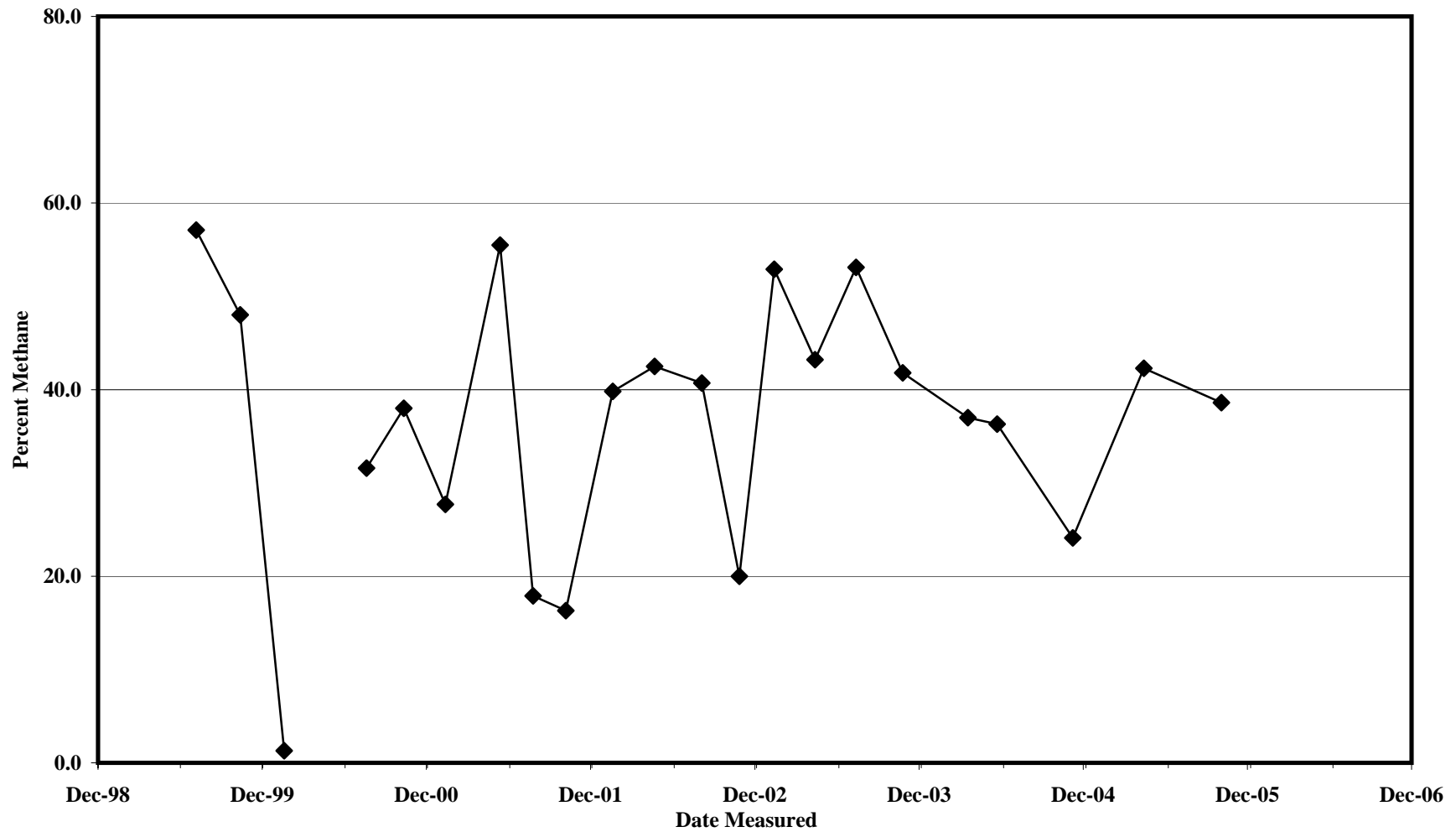


FIGURE F-8

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-8**

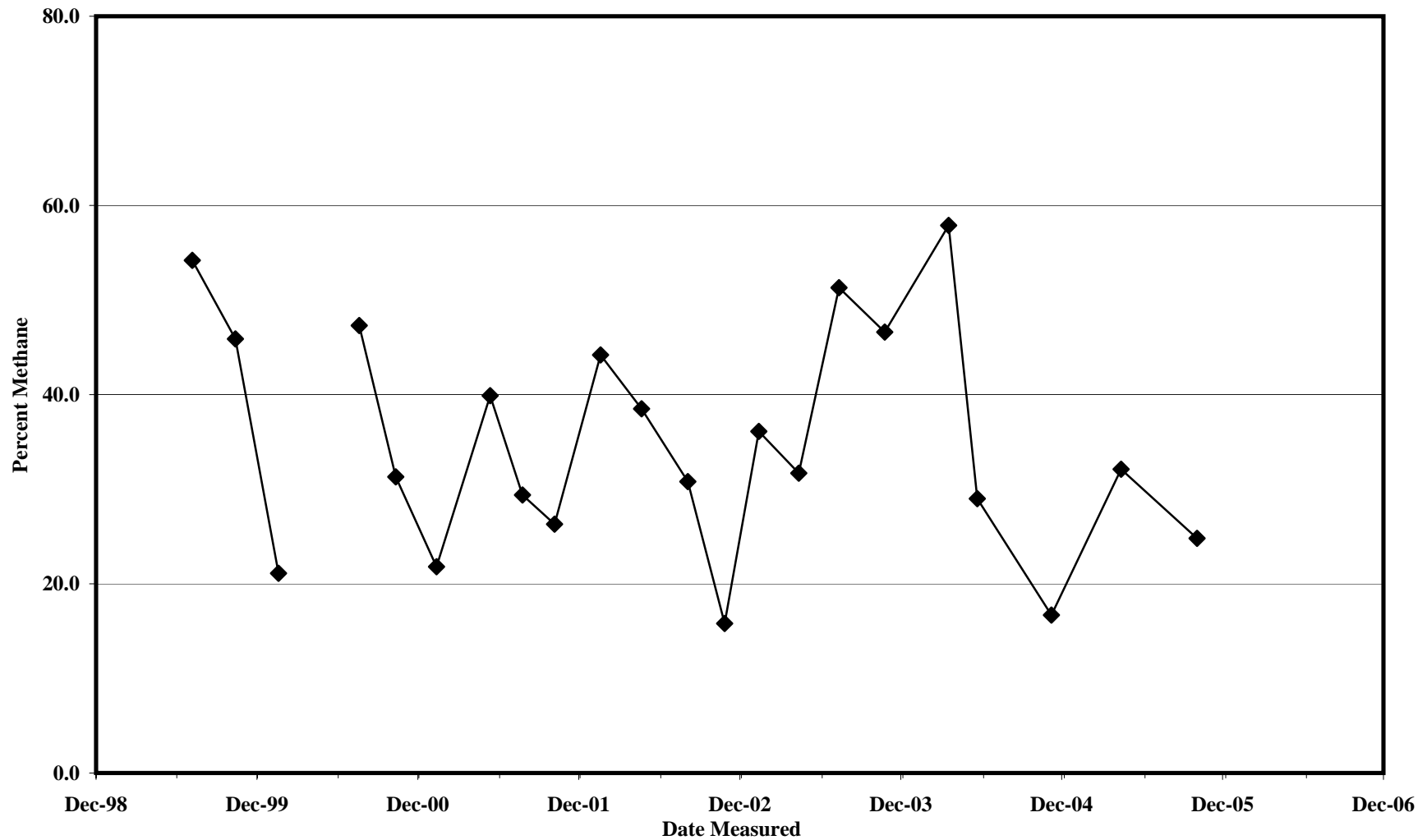


FIGURE F-9

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-9**

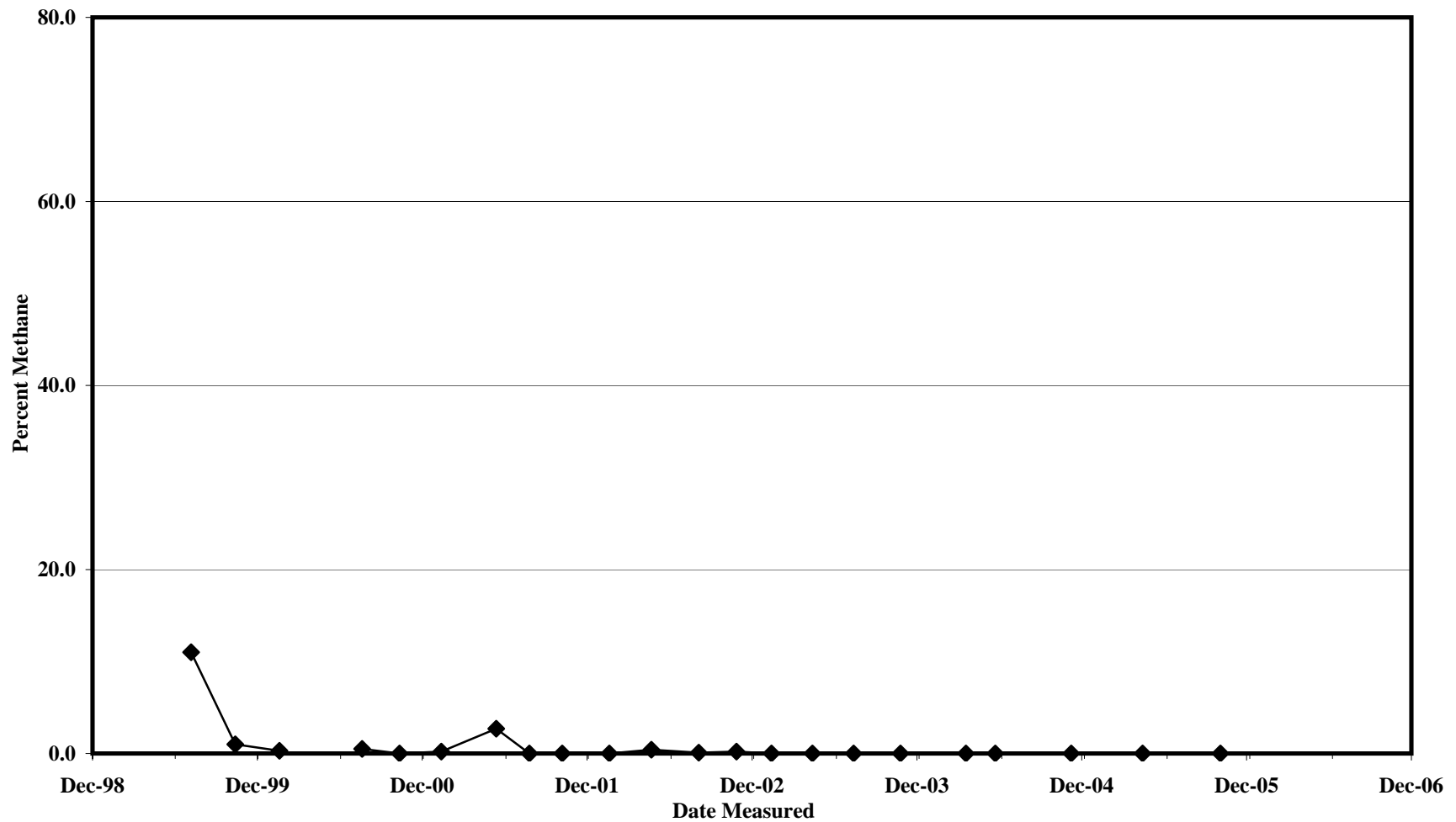


FIGURE F-10

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-10**

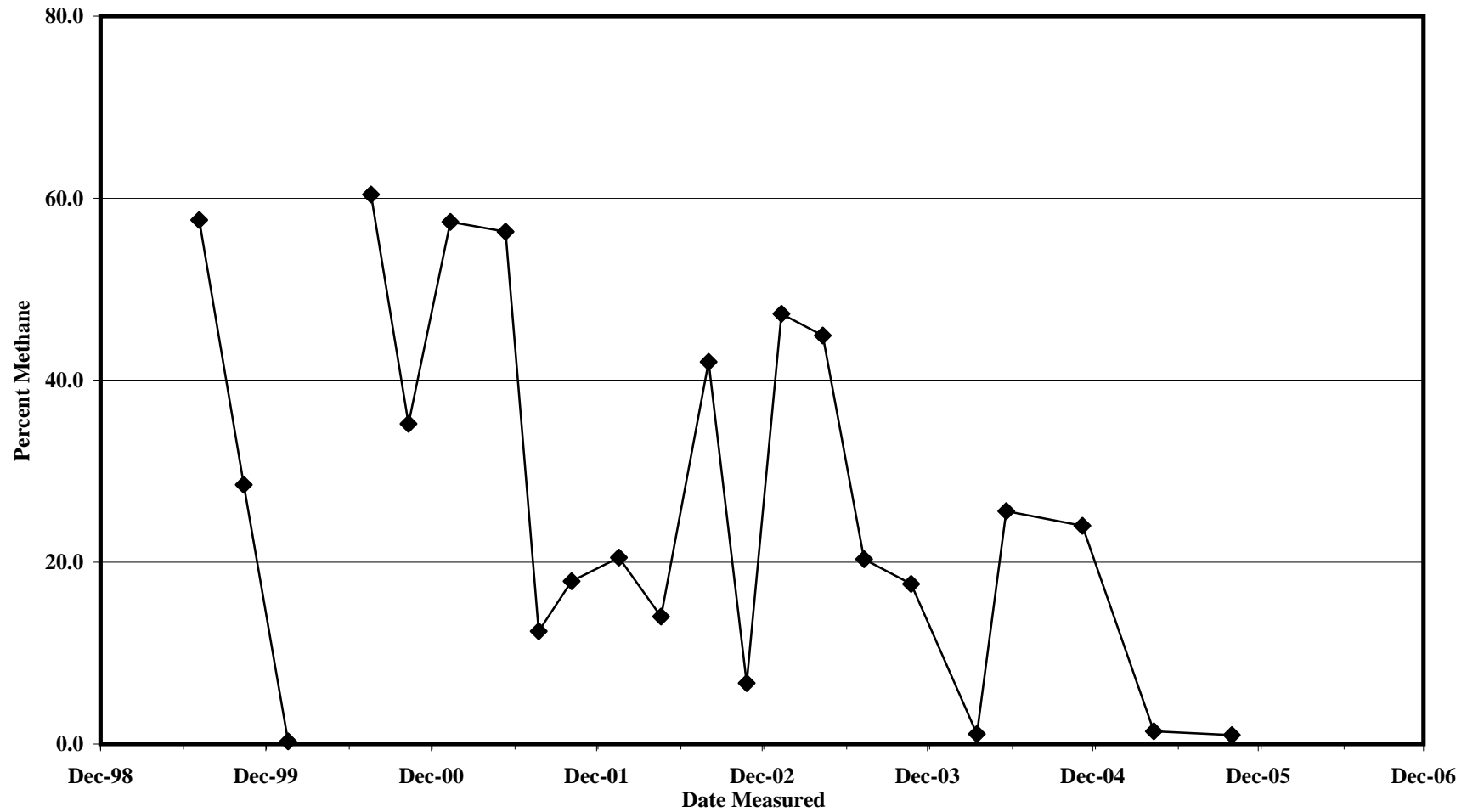


FIGURE F-11

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-11**

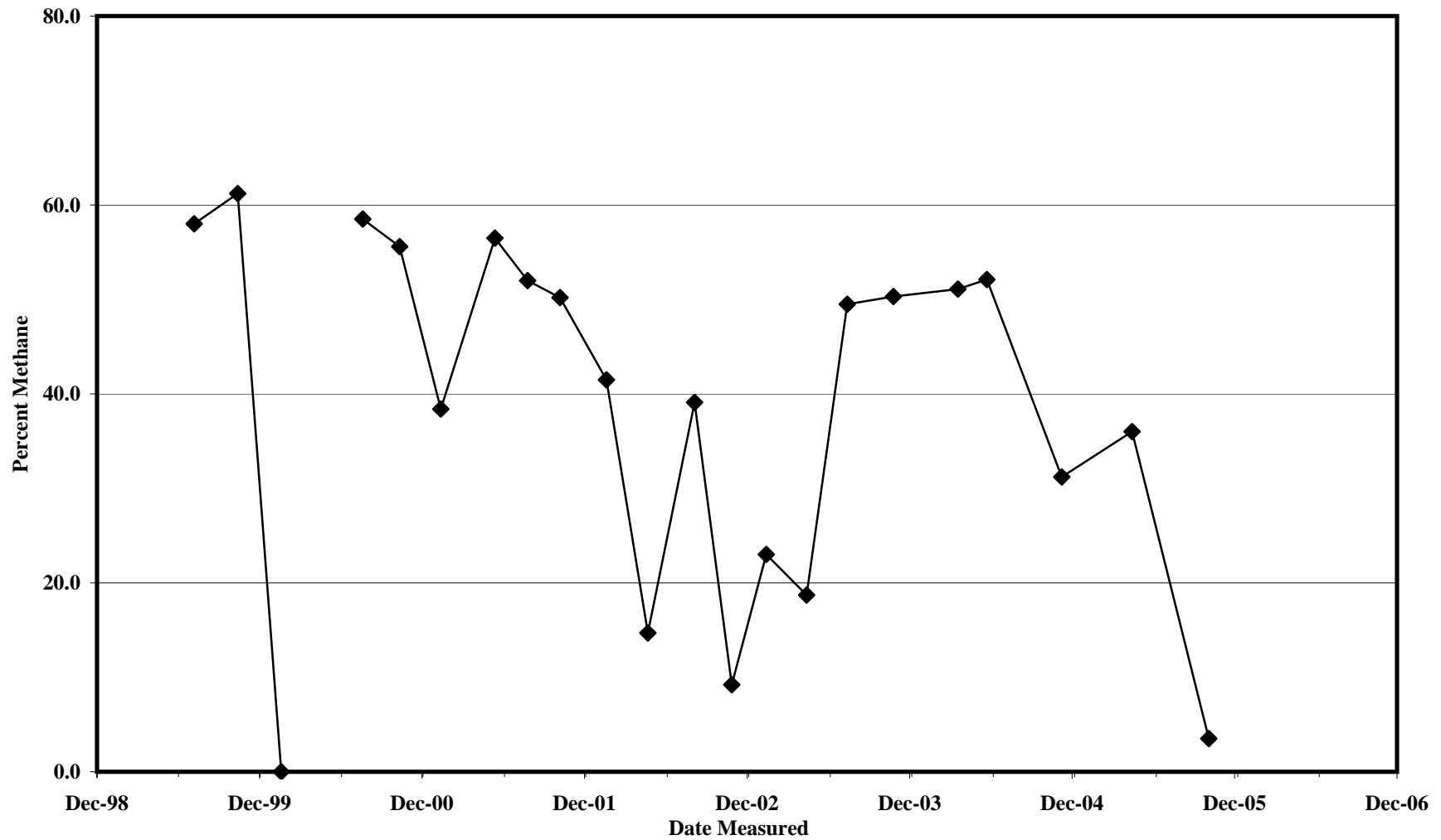


FIGURE F-12

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-12**

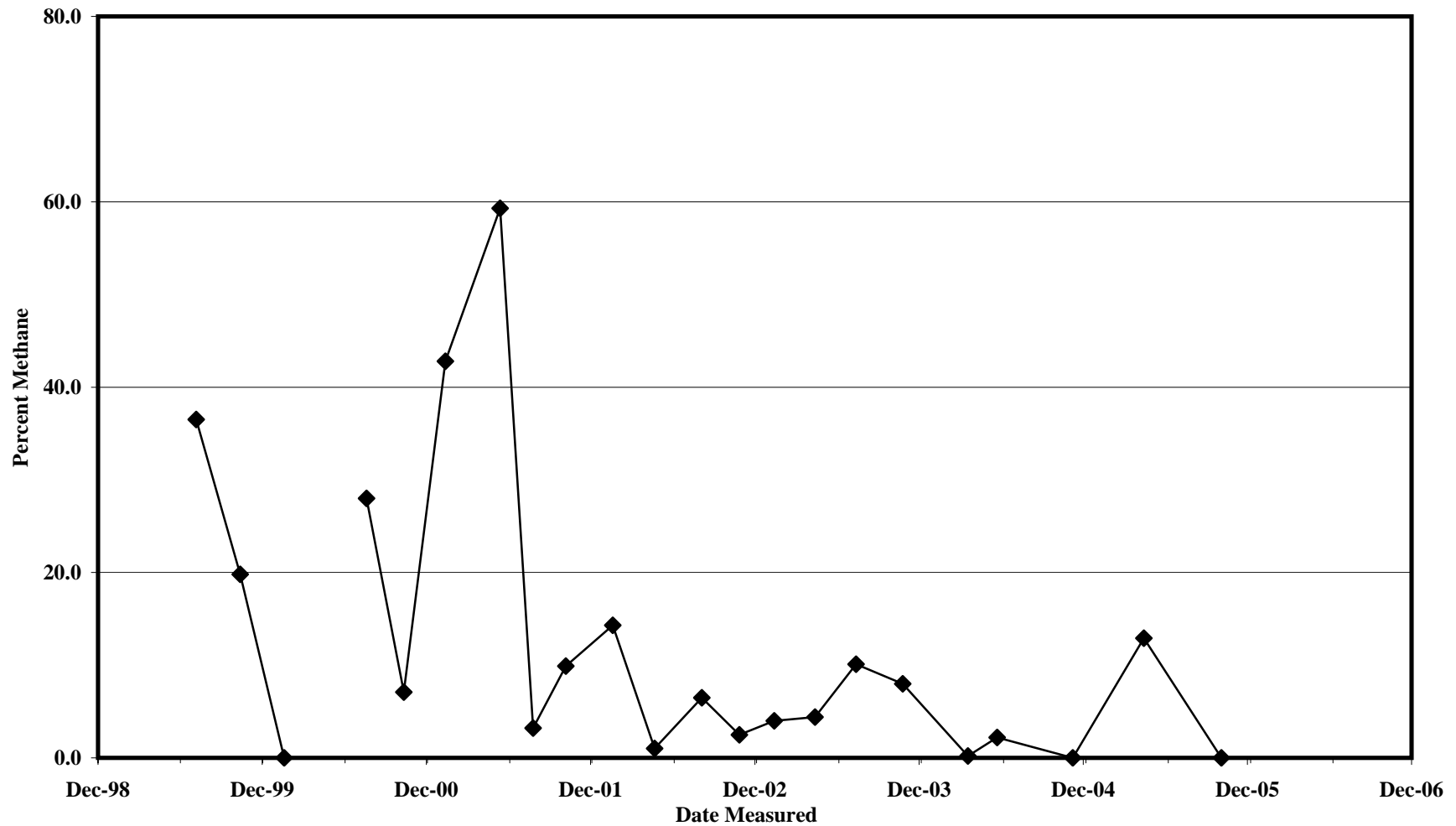
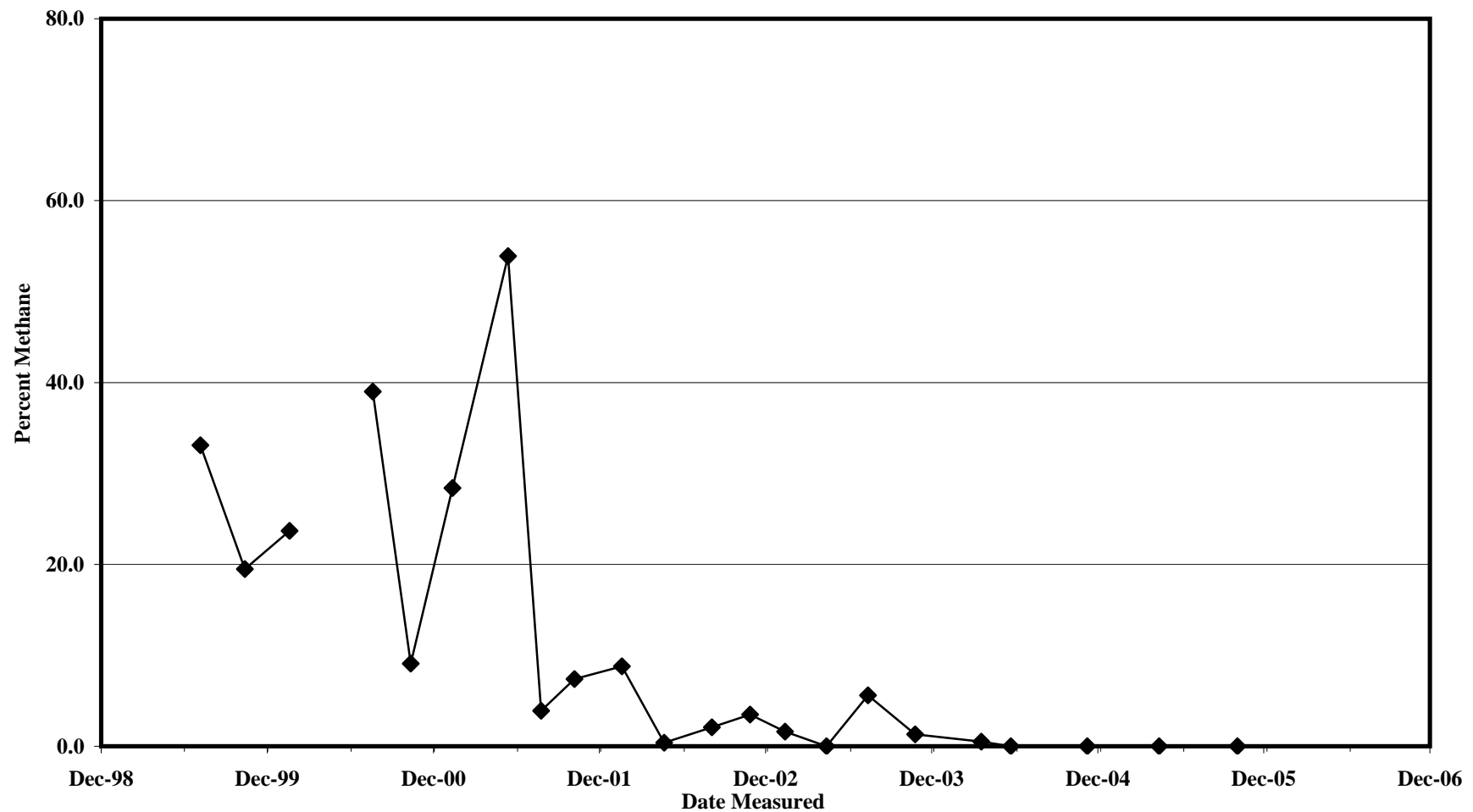


FIGURE F-13

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-13**



DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-14

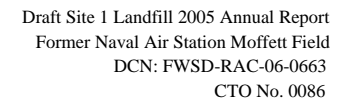


FIGURE F-15

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-15**

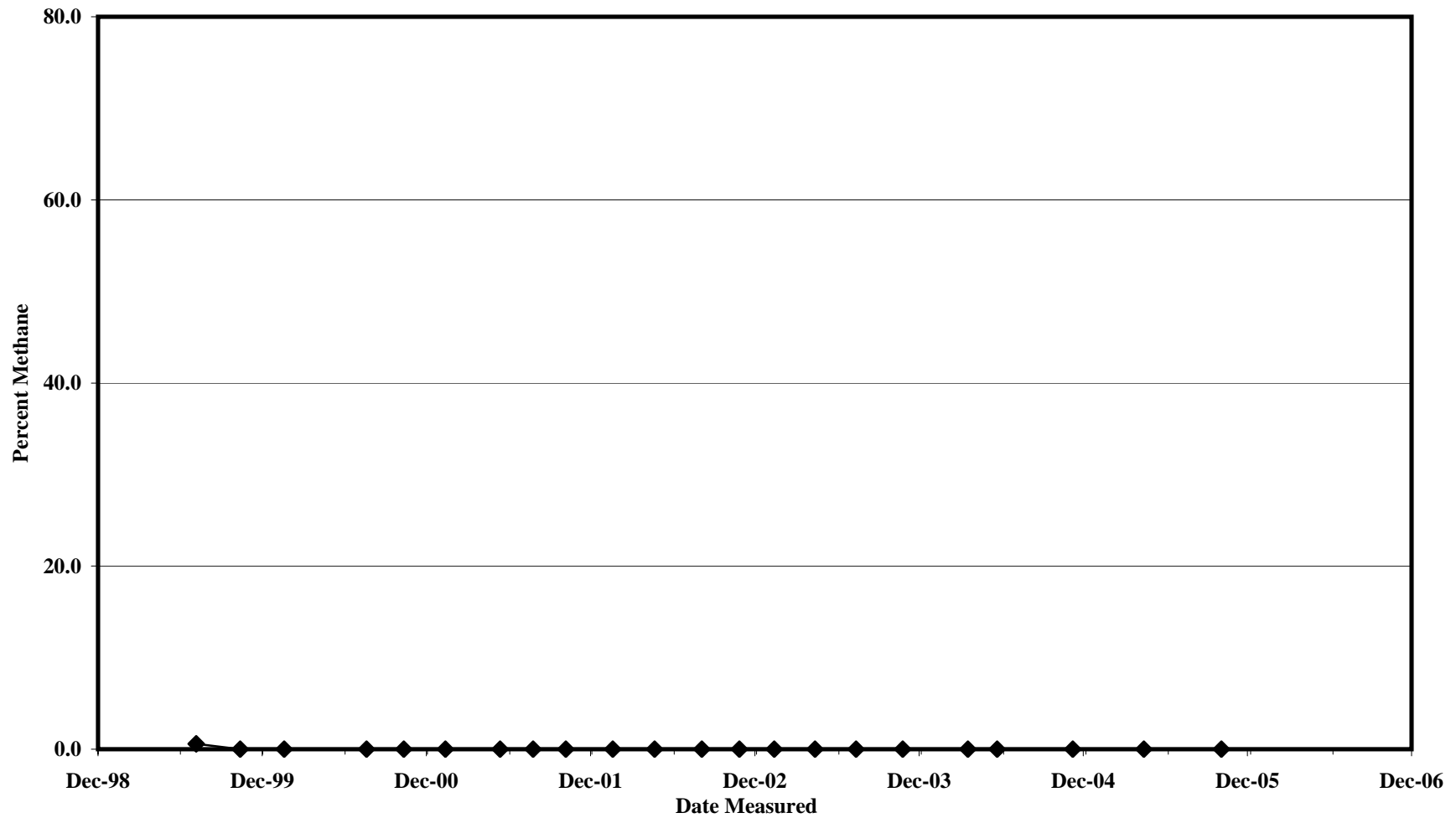
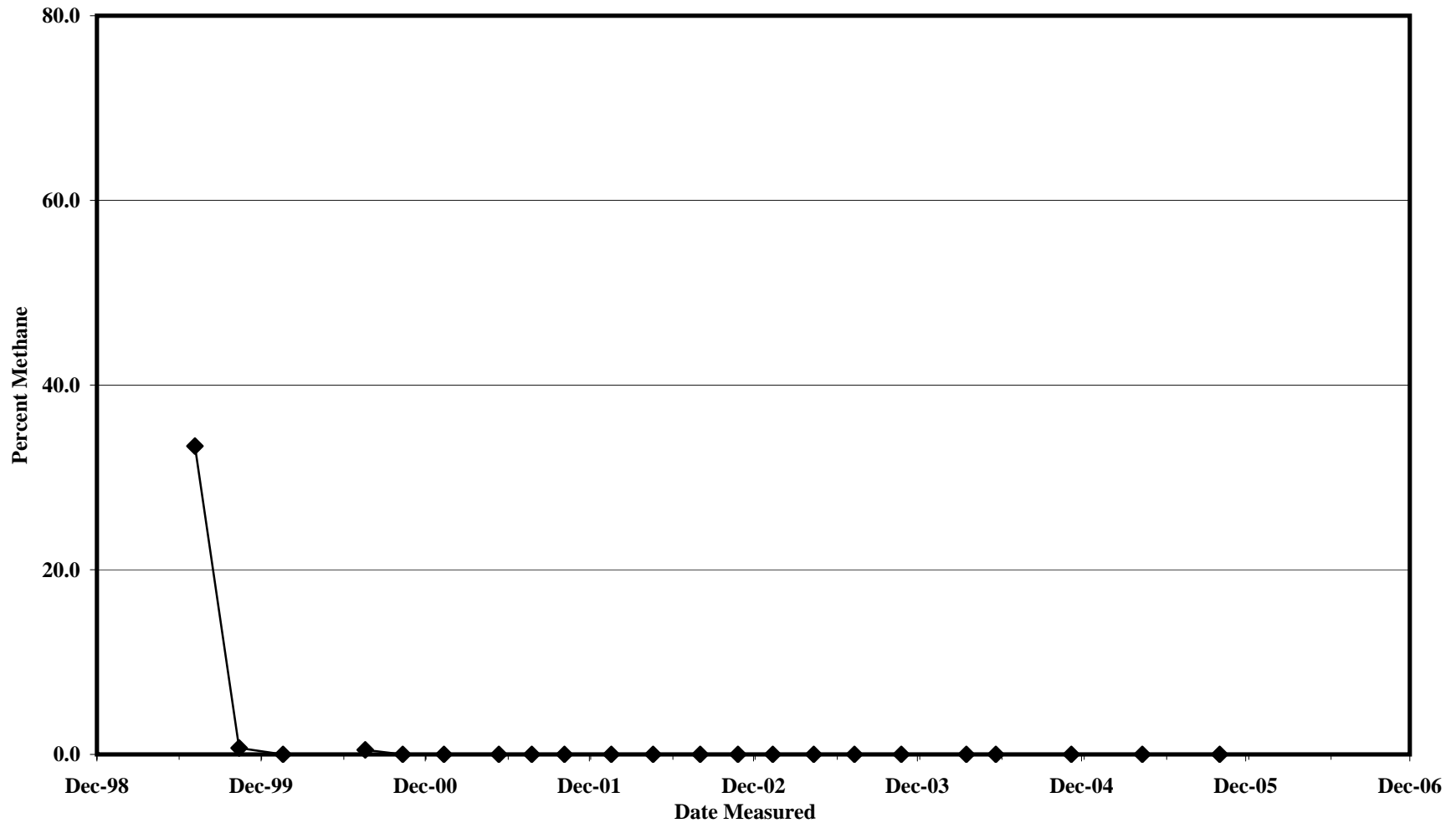


FIGURE F-16

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-16**



DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-17

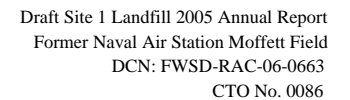


FIGURE F-18

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-18**

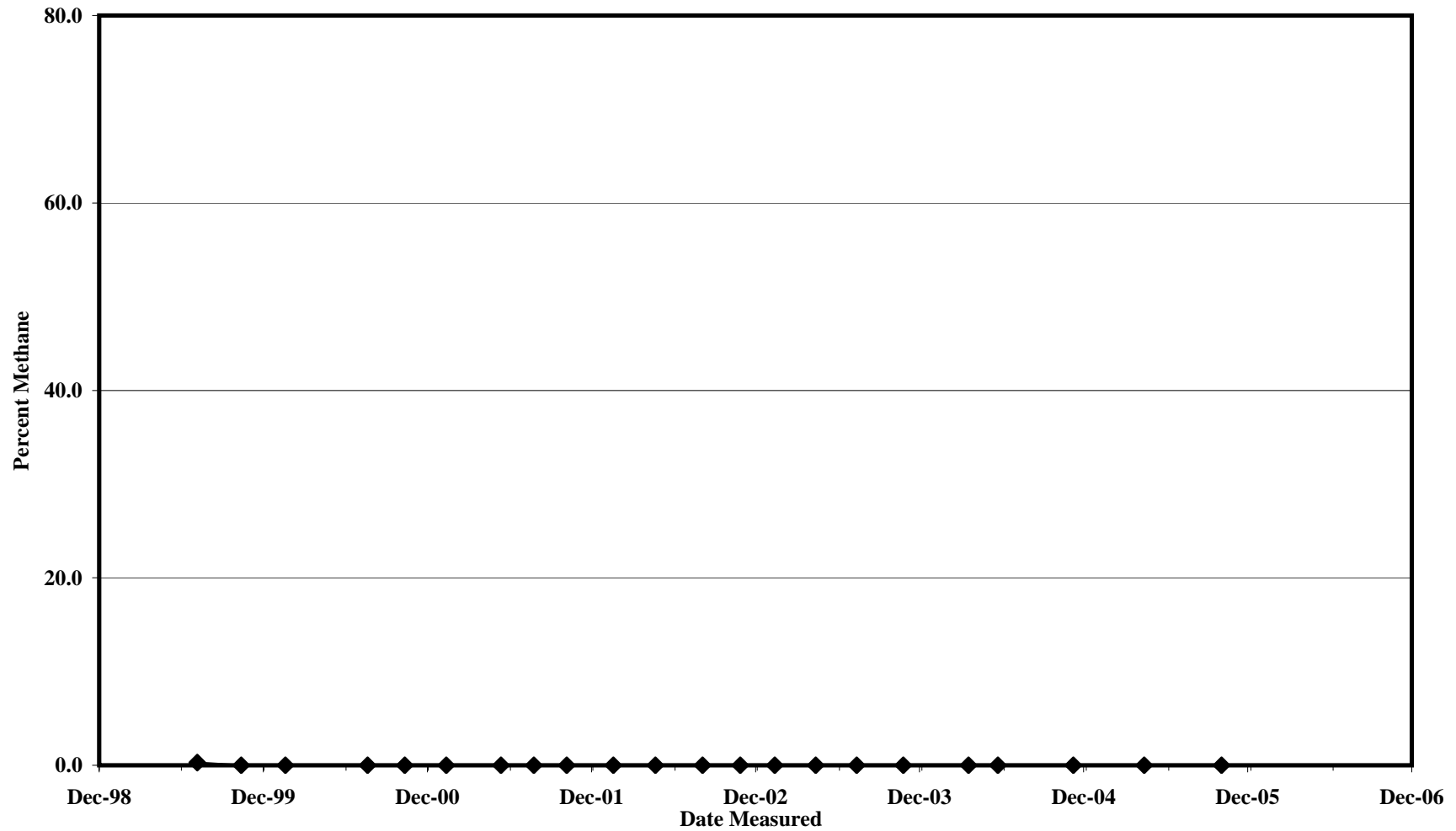


FIGURE F-19

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, PASSIVE GAS VENT GV-19**

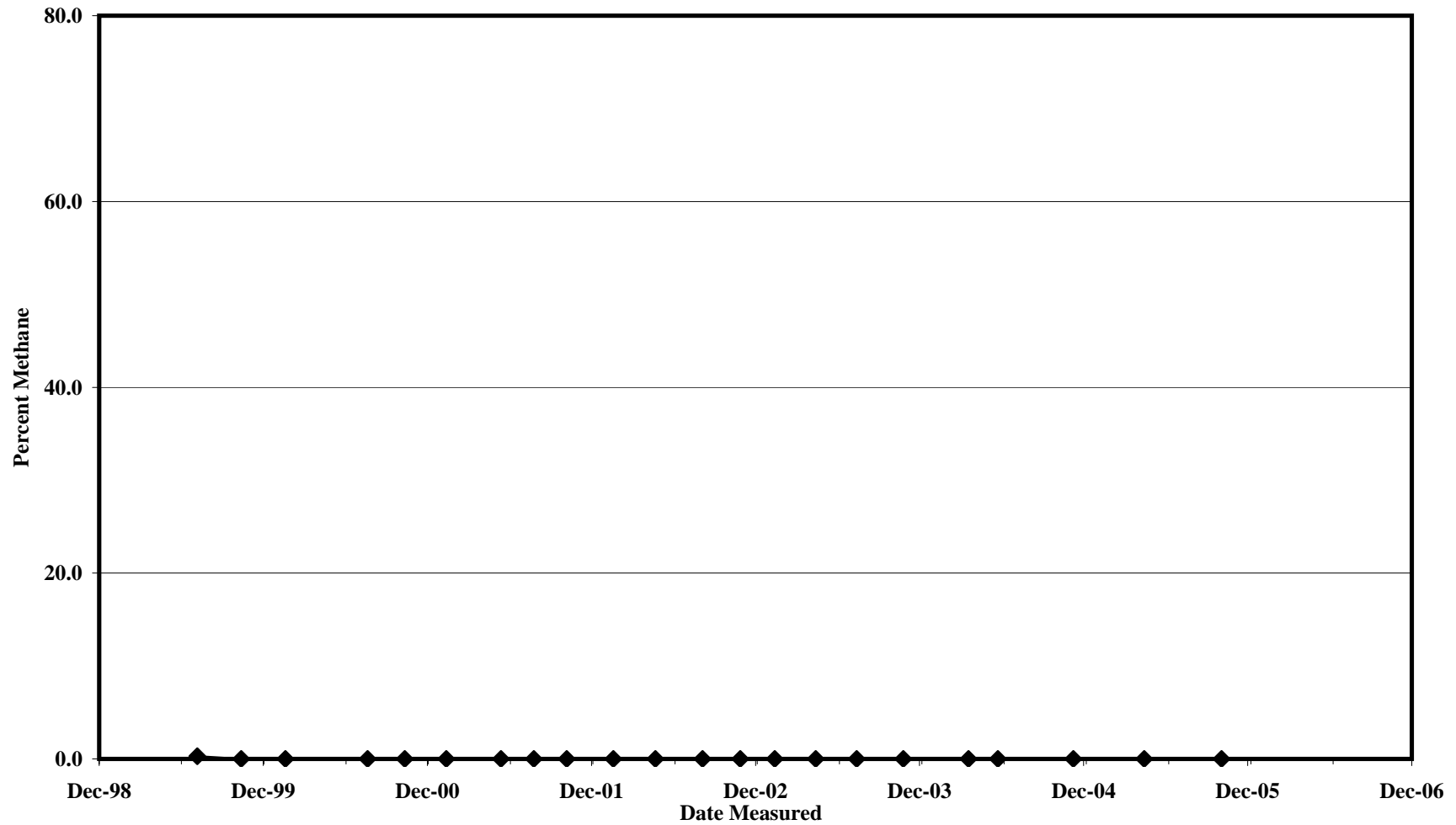


FIGURE F-20

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, LANDFILL GAS MONITORING WELL LGMW1-1**

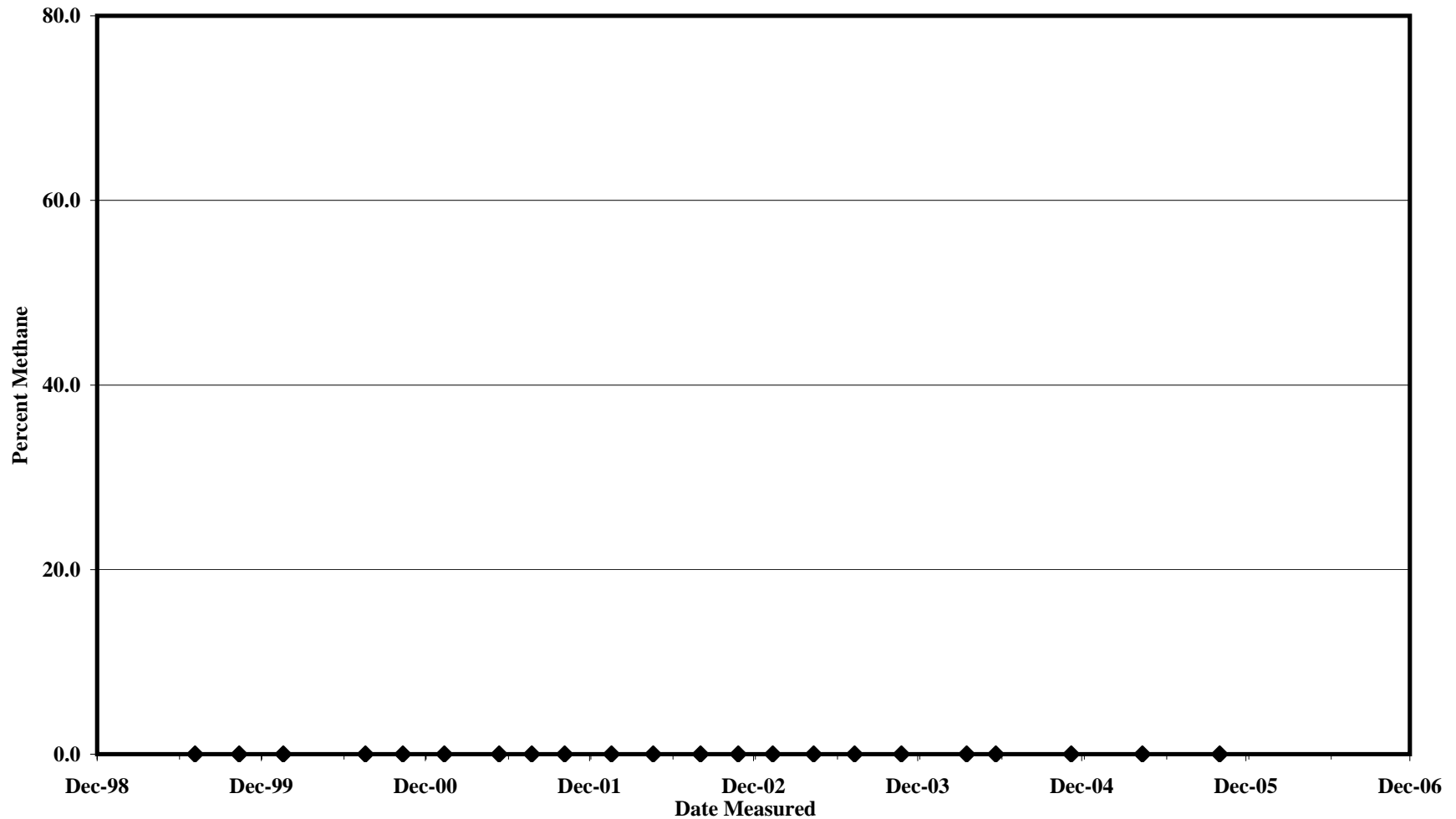


FIGURE F-22

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, LANDFILL GAS MONITORING WELL LGMW1-3**

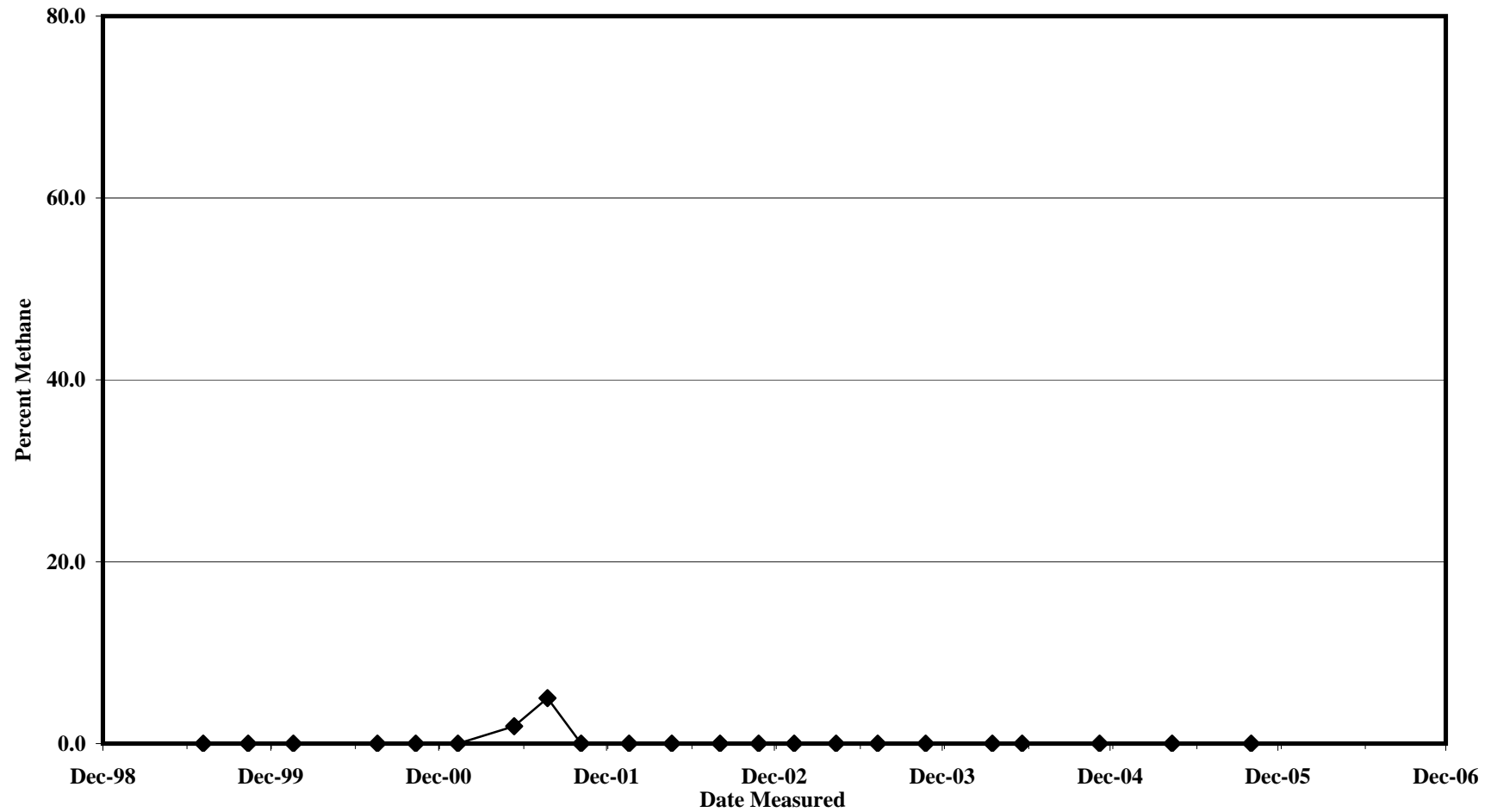
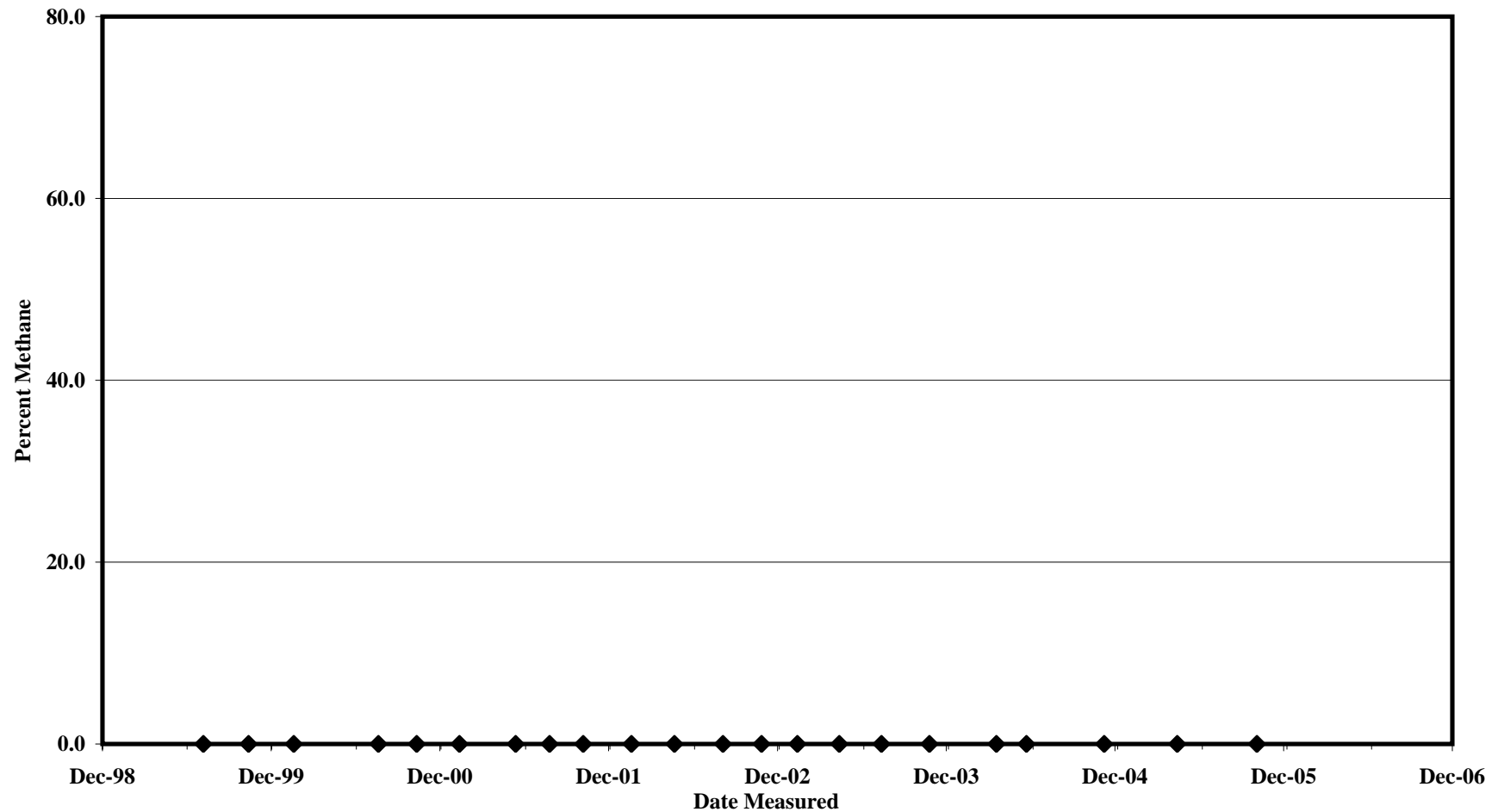


FIGURE F-23

**DRAFT SITE 1 LANDFILL 2005 ANNUAL REPORT
TIME SERIES OF PERCENT METHANE PLOT, LANDFILL GAS MONITORING WELL LGMW1-4**



APPENDIX G

2005 GENERAL SITE INSPECTION REPORTS AND

2005 SANTA CLARA COUNTY LANDFILL INSPECTION REPORTS

2005 GENERAL SITE INSPECTION REPORTS

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|----------------------------|-----------|-------------------|-----|---------------------------------|
| | | Good | Needs Maintenance | N/A | |
| General Site Conditions | | | | | |
| - Perimeter Road | Semiannual | ✓ | | | NO GATE SIGNS |
| - Landfill signs | Semiannual | ✓ | | | NO WE FOUND |
| - Inspect for nesting owls and burrowing animals | Semiannual | ✓ | | | |
| - Security fencing and gates | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Raptor perches | Semiannual | ✓ | | | |
| Landfill Cap | | | | | |
| - Iso-settlement and surveying landfill settlement markers | Every 5 Years ^b | ✓ | | | Completed 3/3/05 |
| - Erosion | Semiannual | ✓ | | | |
| - Visual observations of settling (i.e., cracking, sloughing) | Semiannual | ✓ | | | |
| - Vegetation control and restoration | Semiannual | ✓ | | | |
| - Cap breaching | Semiannual | ✓ | | | YES WE BUT GOOD DRAINAGE |
| - Water drainage | Semiannual | ✓ | | | |
| Landfill Gas Vents | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Screen condition | Semiannual | ✓ | | | |
| Landfill Gas Monitoring Wells | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| Collection Trench Wells | | | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Protective cover condition | Semiannual | ✓ | | | |
| - Identification number legibility | Semiannual | ✓ | | | |

Site 1 Landfill Post-Closure Long-Term Maintenance Plan

Former Naval Air Station Moffett Field

DCN: FWSD-04C-01-2000

CTO No. 0086, Revision 0, 74

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|------------------------|-----------|-------------------|-----|---------------------|
| | | Good | Needs Maintenance | N/A | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| <i>Groundwater Monitoring Wells and Piezometers</i> | | | | | |
| - Riser condition (i.e., paint, integrity, cover) | Semiannual | | ✓ | | W-1R Needs Painting |
| - Identification number legibility | | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| <i>Stormwater Runoff Control</i> | | | | | |
| - Water drainage | Semiannual | ✓ | | | Screens in Place |
| - Culvert and trench drainage | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Settlement | Semiannual | ✓ | | | |

Notes:

(a) Frequency indicates minimum requirements. Semiannual inspections will be conducted in March and September, except for the stormwater runoff control, which will be inspected before the October rainy season and in May at the end of the rainy season. Inspections also are required after significant storm events and as needed.

(b) Every 5 years from the previous surveying and iso-settlement mapping.

Abbreviations and Acronyms:

N/A - not applicable

Moore 3/28/05

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|----------------------------|-----------|-------------------|-----|------------------------|
| | | Good | Needs Maintenance | N/A | |
| <i>General Site Conditions</i> | | | | | |
| - Perimeter Road | Semiannual | ✓ | | | |
| - Landfill signs | Semiannual | ✓ | | | ONE SMALL BURROW FOUND |
| - Inspect for nesting owls and burrowing animals | Semiannual | ✓ | | | ONE SNAKE SEEN |
| - Security fencing and gates | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Raptor perches | Semiannual | | | | |
| <i>Landfill Cap</i> | | | | | |
| - Iso-settlement and surveying landfill settlement markers | Every 5 Years ^b | | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Visual observations of settling (i.e., cracking, sloughing) | Semiannual | ✓ | | | |
| - Vegetation control and restoration | Semiannual | ✓ | | | |
| - Cap breaching | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | | | | |
| <i>Landfill Gas Vents</i> | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Screen condition | | | | | |
| <i>Landfill Gas Monitoring Wells</i> | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | | | | | |
| <i>Collection Trench Wells</i> | | | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Protective cover condition | Semiannual | ✓ | | | |
| - Identification number legibility | Semiannual | ✓ | | | |

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|------------------------|-----------|-------------------|-----|----------------------|
| | | Good | Needs Maintenance | N/A | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | | | | |
| <i>Groundwater Monitoring Wells and Piezometers</i> | | | | | |
| - Riser condition (i.e., paint, integrity, cover) | Semiannual | | ✓ | | W1-18 Needs Painting |
| - Identification number legibility | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | Screens in Place |
| <i>Stormwater Runoff Control</i> | | | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Culvert and trench drainage | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Settlement | Semiannual | ✓ | | | |

Notes:

(a) Frequency indicates minimum requirements. Semiannual inspections will be conducted in March and September, except for the stormwater runoff control, which will be inspected before the October rainy season and in May at the end of the rainy season. Inspections also are required after significant storm events and as needed.

(b) Every 5 years from the previous surveying and iso-settlement mapping.

Abbreviations and Acronyms:

N/A - not applicable

5/18/05
[Signature]

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|----------------------------|-----------|-------------------|-----|---------------------------|
| | | Good | Needs Maintenance | N/A | |
| <i>General Site Conditions</i> | | | | | |
| - Perimeter Road | Semiannual | ✓ | | | |
| - Landfill signs | Semiannual | ✓ | | | Two Burrows - 1 East Road |
| - Inspect for nesting owls and burrowing animals | Semiannual | ✓ | | | |
| - Security fencing and gates | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Raptor perches | Semiannual | ✓ | | | |
| <i>Landfill Cap</i> | | | | | |
| - Iso-settlement and surveying landfill settlement markers | Every 5 Years ^b | ✓ | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Visual observations of settling (i.e., cracking, sloughing) | Semiannual | ✓ | | | |
| - Vegetation control and restoration | Semiannual | | Needs Mow | | Schedule For Mow in Sept. |
| - Cap breaching | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| <i>Landfill Gas Vents</i> | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Screen condition | Semiannual | ✓ | | | |
| <i>Landfill Gas Monitoring Wells</i> | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| <i>Collection Trench Wells</i> | | | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Protective cover condition | Semiannual | ✓ | | | |
| - Identification number legibility | Semiannual | ✓ | | | |

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|------------------------|-----------|-------------------|-----|----------|
| | | Good | Needs Maintenance | N/A | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| Groundwater Monitoring Wells and Piezometers | | | | | |
| - Riser condition (i.e., paint, integrity, cover) | Semiannual | ✓ | | | |
| - Identification number legibility | Semiannual | OK | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| Stormwater Runoff Control | | | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Culvert and trench drainage | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Settlement | Semiannual | ✓ | | | |

Notes:

(a) Frequency indicates minimum requirements. Semiannual inspections will be conducted in March and September, except for the stormwater runoff control, which will be inspected before the October rainy season and in May at the end of the rainy season. Inspections also are required after significant storm events and as needed.

(b) Every 5 years from the previous surveying and iso-settlement mapping.

Abbreviations and Acronyms:
N/A - not applicable

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8-12-05

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

SITE 1 LANDFILL GENERAL MAINTENANCE PLAN

| Item | Frequency ^a | Condition | | | Comments |
|---|----------------------------|-----------|-------------------|-----|----------|
| | | Good | Needs Maintenance | N/A | |
| General Site Conditions | | | | | |
| - Perimeter Road | Semiannual | ✓ | | | |
| - Landfill signs | Semiannual | ✓ | | | |
| - Inspect for nesting owls and burrowing animals | Semiannual | ✓ | | | |
| - Security fencing and gates | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Raptor perches | Semiannual | ✓ | | | |
| Landfill Cap | | | | | |
| - Iso-settlement and surveying landfill settlement markers | Every 5 Years ^b | ✓ | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Visual observations of settling (i.e., cracking, sloughing) | Semiannual | ✓ | | | |
| - Vegetation control and restoration | Semiannual | ✓ | | | |
| - Cap breaching | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| Landfill Gas Vents | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Screen condition | Semiannual | ✓ | | | |
| Landfill Gas Monitoring Wells | | | | | |
| - Riser condition (i.e., paint, integrity) | Semiannual | ✓ | | | |
| - Identification tag present | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | ✓ | | | |
| Collection Trench Wells | | | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Protective cover condition | Semiannual | ✓ | | | |
| - Identification number legibility | Semiannual | ✓ | | | |

SMALL DISCARDS & GEOTECH ACTIVITY
HOPE STREETS CRACKED AT BOOTS - NOT A

NEWED

Site 1 Landfill Post-Closure Long-Term Maintenance Plan
General Neutral Air Station Monitor Field

Site 1 Landfill Post-Closure Long-Term Maintenance Plan

Former Naval Air Station Moffett Field

DCN: FWSD-RAC-04-2000

CTO No. 0086, Revision 0, 0

TABLE 4-1

SITE 1 LANDFILL GENERAL INSPECTION CHECKLIST AND FREQUENCY

| Item | Frequency ^a | Condition | | | Comments |
|---|------------------------|-----------|-------------------|-----|----------|
| | | Good | Needs Maintenance | N/A | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | Semiannual | | | | |
| <i>Groundwater Monitoring Wells and Piezometers</i> | | | | | |
| - Riser condition (i.e., paint, integrity, cover) | Semiannual | ✓ | | | |
| - Identification number legibility | Semiannual | OK | | | |
| - Concrete collar condition | Semiannual | ✓ | | | |
| - Traffic protection (i.e., bollards) | Semiannual | ✓ | | | |
| - Well cap integrity | Semiannual | ✓ | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Well locks | | | | | |
| <i>Stormwater Runoff Control</i> | | | | | |
| - Water drainage | Semiannual | ✓ | | | |
| - Culvert and trench drainage | Semiannual | ✓ | | | |
| - Riprap | Semiannual | ✓ | | | |
| - Erosion | Semiannual | ✓ | | | |
| - Settlement | Semiannual | ✓ | | | |

SCREWS STILL IN PLACE

[Signature]
11/14/05

Notes:

(a) Frequency indicates minimum requirements. Semiannual inspections will be conducted in March and September, except for the stormwater runoff control, which will be inspected before the October rainy season and in May at the end of the rainy season. Inspections also are required after significant storm events and as needed.

(b) Every 5 years from the previous surveying and iso-settlement mapping.

Abbreviations and Acronyms:

N/A - not applicable

2005 SANTA CLARA COUNTY LANDFILL INSPECTION REPORTS

STATE OF CALIFORNIA
CWMB-189 (New 6/04)

Closed Disposal Site Inspection Report

CALIFORNIA INTEGRATED WASTE
MANAGEMENT BOARD

Enforcement Agency: Santa Clara County, Department of Environmental Health - Local Enforcement Agency

Page 1 of 1

| | | | | |
|---|--|----------------------------|--|-----------------|
| PAGE/FACILITY FILE NUMBER/Unit # 43-AA-0005 | PROGRAM CODE LOCAL #1 STATE #4.5 LOCAL = L | INSPECTION DATE 2/23/05 | TIME IN 10:00 AM | INSPECTION TIME |
| FACILITY NAME NASA/MOFFETT FIELD - Sites 1 & 22 Landfills | | | RECEIVED BY (OPERATOR) <i>Day / Monahan</i> | |
| FACILITY LOCATION Moffett Field, CA | | | OWNER United States Government | |
| INSPECTOR Chris Rummel, R.E.H.S. | INSPECTOR SIGNATURE <i>Chris Rummel</i> | | ALSO PRESENT Mary Parker - Proj. Mgr | |

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 27 CALIFORNIA CODE OF REGULATION (CCR).

THE STANDARDS BELOW ARE CONSIDERED IN COMPLIANCE UNLESS OTHERWISE MARKED WITH ONE OF THE FOLLOWING: V = VIOLATION A = AREA OF CONCERN NA = NOT APPLICABLE

| POSTCLOSURE | V | A | NA |
|--------------------------------------|---|---|----|
| 20750 - SITE MAINTENANCE | | | |
| 21180 - POSTCLOSURE MAINTENANCE | | | |
| 21190 - POSTCLOSURE LAND USE | | | |
| GAS MONITORING AND CONTROL SYSTEMS | | | |
| 20919 - EXEMPTIONS | | | |
| 20919 - GAS CONTROLS | | | |
| 20919.5 - EXPLOSIVE GAS CONTROL | | | |
| 20921 - GAS MONITORING CONTROL | | | |
| 20923 - MONITORING | | | |
| 20925 - PERIMETER MONITORING NETWORK | | | |
| 20931 - STRUCTURE MONITORING | | | |
| 20932 - MONITORED PARAMETERS | | | |
| 20933 - MONITORING FREQUENCY | | | |
| 20934 - REPORTING | | | |
| 20937 - CONTROL | | | |
| GRADING/FINAL COVER | | | |
| 20950 - GRADING OF FILL SURFACES | | | |
| 21140 - FINAL COVER | | | |
| 21142 - FINAL GRADING | | | |
| 21145 - SLOPE STABILITY | | | |

| DRAINAGE AND EROSION CONTROL | V | A | NA |
|---|---|---|----|
| 20820 - DRAINAGE/EROSION CONTROL | | | |
| 21150 - DRAINAGE/EROSION CONTROL | | | |
| MONITORING AND CONTROL SYSTEMS | | | |
| 20790 - LEACHATE CONTROL | | | |
| 20830 - LITTER CONTROL | | | |
| 21160 - LF GAS CONTROL/LEACHATE CONTACT | | | |
| SECURITY | | | |
| 20630 - SITE SECURITY | | | |
| 21135 - SECURITY AT CLOSED SITES | | | |
| 21137 - STRUCTURE REMOVAL | | | |
| RECORDS | | | |
| 21130 - EMERGENCY RESPONSE PLAN | | | |
| 21170 - RECORDING | | | |
| 21200 - CHANGE OF OWNERSHIP | | | |
| CLOSURE PLANS | | | |
| 21880 - CERTIFICATION OF CLOSURE | | | |
| 21890 - REVISION OF APPROVED PLANS FOR C/PC MAINT | | | |
| OTHER | | | |
| | | | |
| | | | |
| | | | |

COMMENTS (USE CWMB 3 FOR ADDITIONAL SPACE)

SITE 1: Site inspection revealed no problem areas. Site looked excellent.

SITE 22: No deficiencies to report.

DOCUMENTS RECEIVED SINCE LAST INSPECTION 11/17/04:

March 2004 Site 1 Sampling Event, Former NAS Moffett Field

May 2004 Site 1 Sampling Event, Former NAS Moffett Field

Closed Disposal Site Inspection Report

Enforcement Agency: Santa Clara County, Department of Environmental Health - Local Enforcement Agency

Page 1 of 1

| | | | | |
|--|--|-----------------------------|--|-----------------|
| FACILITY FILE NUMBER/DATE | PROGRAM CODE LOCAL #1 STATE #5 | INSPECTION DATE MM DD YY | TIME IN 10:00 AM | INSPECTION TIME |
| 43-AA-0005 | LOCAL = L | 5/18/05 | TIME OUT 12:00 | 2 hrs. |
| FACILITY NAME NASA/MOFFETT FIELD - Sites 1 & 22 Landfills | | | RECEIVED BY (OPERATOR) Dan / Murchawa | |
| FACILITY LOCATION Moffett Field, CA | | | OWNER United States Government | |
| INSPECTOR Chris Rummel, R.E.H.S. | INSPECTOR SIGNATURE <i>Chris Rummel</i> | | ALSO PRESENT Bill Ogle & David Smith | |

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 27 CALIFORNIA CODE OF REGULATION (CCR).

THE STANDARDS BELOW ARE CONSIDERED IN COMPLIANCE UNLESS OTHERWISE MARKED WITH ONE OF THE FOLLOWING: V = VIOLATION A = AREA OF CONCERN NA = NOT APPLICABLE

| POSTCLOSURE | V | A | NA |
|--------------------------------------|---|---|----|
| 20750 - SITE MAINTENANCE | | | |
| 21180 - POSTCLOSURE MAINTENANCE | | | |
| 21190 - POSTCLOSURE LAND USE | | | |
| GAS MONITORING AND CONTROL SYSTEMS | | | |
| 20918 - EXEMPTIONS | | | |
| 20919 - GAS CONTROLS | | | |
| 20919.5 - EXPLOSIVE GAS CONTROL | | | |
| 20921 - GAS MONITORING/CONTROL | | | |
| 20923 - MONITORING | | | |
| 20925 - PERIMETER MONITORING NETWORK | | | |
| 20931 - STRUCTURE MONITORING | | | |
| 20932 - MONITORED PARAMETERS | | | |
| 20933 - MONITORING FREQUENCY | | | |
| 20934 - REPORTING | | | |
| 20937 - CONTROL | | | |
| GRADING/FINAL COVER | | | |
| 20650 - GRADING OF FILL SURFACES | | | |
| 21140 - FINAL COVER | | | |
| 21142 - FINAL GRADING | | | |
| 21145 - SLOPE STABILITY | | | |

| DRAINAGE AND EROSION CONTROL | V | A | NA |
|---|---|---|----|
| 20820 - DRAINAGE/EROSION CONTROL | | | |
| 21150 - DRAINAGE/EROSION CONTROL | | | |
| MONITORING AND CONTROL SYSTEMS | | | |
| 20790 - LEACHATE CONTROL | | | |
| 20830 - LITTER CONTROL | | | |
| 21180 - LF GAS CONTROL/LEACHATE CONTACT | | | |
| SECURITY | | | |
| 20530 - SITE SECURITY | | | |
| 21135 - SECURITY AT CLOSED SITES | | | |
| 21137 - STRUCTURE REMOVAL | | | |
| RECORDS | | | |
| 21130 - EMERGENCY RESPONSE PLAN | | | |
| 21170 - RECORDING | | | |
| 21200 - CHANGE OF OWNERSHIP | | | |
| CLOSURE PLANS | | | |
| 21880 - CERTIFICATION OF CLOSURE | | | |
| 21890 - REVISION OF APPROVED PLANS FOR C/PC MAINT | | | |
| OTHER | | | |
| | | | |
| | | | |

COMMENTS (USE CIWMB 3 FOR ADDITIONAL SPACE)

SITE 1: Site inspection revealed no problem areas. Site looked excellent.

SITE 22: No deficiencies to report.

DOCUMENTS RECEIVED SINCE LAST INSPECTION 2/23/05:

March 18, 2005 Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan Rev.0
March 18, 2005 Final Site 1 Landfill Post-Closure Long-Term Maintenance Plan Rev.0
March 31, 2005 Groundwater Report Operable Unit 1, Rev. 0

Closed Disposal Site Inspection Report

Enforcement Agency: Santa Clara County, Department of Environmental Health - Local Enforcement Agency

Page 1 of 1

| | | | | |
|--|--|--|--|-----------------|
| FACILITY FILE NUMBER/Unit # 43-AA-0005 | PROGRAM CODE LOCAL = L STATE = S LOCAL = L | INSPECTION DATE MM DD YY 8/24/05 | TIME IN 10:00 AM TIME OUT 12:00 | INSPECTION TIME |
| FACILITY NAME NASA/MOFFETT FIELD - Sites 1 & 22 Landfills | | | RECEIVED BY (OPERATOR) Gary Muneakawa <i>Gary Muneakawa</i> | |
| FACILITY LOCATION Moffett Field, CA | | | OWNER United States Government | |
| INSPECTOR Chris Rummel, R.E.H.S. | | INSPECTOR SIGNATURE <i>Chris Rummel</i> | ALSO PRESENT Bill Ogle, David Smith, Quan Mai | |

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 27 CALIFORNIA CODE OF REGULATION (CCR).

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| POSTCLOSURE | V | A | NA |
|--------------------------------------|---|---|----|
| 20750 - SITE MAINTENANCE | | | |
| 21180 - POSTCLOSURE MAINTENANCE | | | |
| 21190 - POSTCLOSURE LAND USE | | | |
| GAS MONITORING AND CONTROL SYSTEMS | | | |
| 20918 - EXEMPTIONS | | | |
| 20919 - GAS CONTROLS | | | |
| 20919.5 - EXPLOSIVE GAS CONTROL | | | |
| 20921 - GAS MONITORING/CONTROL | | | |
| 20923 - MONITORING | | | |
| 20925 - PERIMETER MONITORING NETWORK | | | |
| 20931 - STRUCTURE MONITORING | | | |
| 20932 - MONITORED PARAMETERS | | | |
| 20933 - MONITORING FREQUENCY | | | |
| 20934 - REPORTING | | | |
| 20937 - CONTROL | | | |
| GRADING/FINAL COVER | | | |
| 20650 - GRADING OF FILL SURFACES | | | |
| 21140 - FINAL COVER | | | |
| 21142 - FINAL GRADING | | | |
| 21145 - SLOPE STABILITY | | | |

| DRAINAGE AND EROSION CONTROL | V | A | NA |
|---|---|---|----|
| 20820 - DRAINAGE/EROSION CONTROL | | | |
| 21150 - DRAINAGE/EROSION CONTROL | | | |
| MONITORING AND CONTROL SYSTEMS | | | |
| 20790 - LEACHATE CONTROL | | | |
| 20830 - LITTER CONTROL | | | |
| 21160 - LF GAS CONTROL/LEACHATE CONTACT | | | |
| SECURITY | | | |
| 20530 - SITE SECURITY | | | |
| 21135 - SECURITY AT CLOSED SITES | | | |
| 21137 - STRUCTURE REMOVAL | | | |
| RECORDS | | | |
| 21130 - EMERGENCY RESPONSE PLAN | | | |
| 21170 - RECORDING | | | |
| 21200 - CHANGE OF OWNERSHIP | | | |
| CLOSURE PLANS | | | |
| 21880 - CERTIFICATION OF CLOSURE | | | |
| 21890 - REVISION OF APPROVED PLANS FOR C/PC MAINT | | | |
| OTHER | | | |
| | | | |
| | | | |

COMMENTS (USE CIWMB 3 FOR ADDITIONAL SPACE)

SITE 1: Site inspection revealed no problem areas. Site looked excellent.

Gas vents were tested during the inspection using a portable methane gas detector with the following results:

GV-3 = 0 ppm, GV-4 = 0 ppm, GV-5 = 7% gas, GV-7 = 44% gas, GV-8 = 40% gas, GV-10 = 60%LEL, GV-11 = 38% gas,
GV-12 = 1 to 3% LEL.

SITE 22: No deficiencies to report.

Perimeter methane gas monitoring well in the perimeter road, LGMW-3 was found to have a 3% gas reading when stabilized, with an initial spike during purging at ranges up to 20% gas by volume. Previous testing of this well by Foster Wheeler indicated the same reading of 3% gas. The limit for perimeter gas migration is 5% gas at the facility boundary, which in this case is not at the perimeter of the waste, but rather the property boundary. Thus, reading of this well above 5% gas are not necessarily a violation.

Note: Semi-annual monitoring plan with sampling in February and August is appropriate.

DOCUMENTS RECEIVED SINCE LAST INSPECTION 5/18/05:

June 22, 2005 Site 1 Landfill - 2004 Annual Report-Draft

Aug. 12, 2005 Site 22 Post Construction Operatuins, Maintenance, and Monitoring Plan Addendum - Rev. 0 -Draft

Closed Disposal Site Inspection Report

Enforcement Agency: Santa Clara County, Department of Environmental Health - Local Enforcement Agency

Page 1 of 1

| | | | | |
|--|--|---|---|-----------------|
| FACILITY FILE NUMBER/Unit # 43-AA-0005 | PROGRAM CODE LOCAL = L STATE = S LOCAL = L | INSPECTION DATE MM DD YY 11/16/05 | TIME IN 10:00 AM | INSPECTION TIME |
| FACILITY NAME NASA/MOFFETT FIELD - Sites 1 & 22 Landfills | | | RECEIVED BY (OPERATOR) Gary Munekawa | |
| FACILITY LOCATION Moffett Field, CA | | | OWNER United States Government | |
| INSPECTOR Chris Rummel, R.E.H.S. | INSPECTOR SIGNATURE <i>Chris Rummel</i> | | ALSO PRESENT Bill Ogle, David Smith | |

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 27 CALIFORNIA CODE OF REGULATION (CCR).

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| POSTCLOSURE | V | A | NA |
|--------------------------------------|---|---|----|
| 20750 - SITE MAINTENANCE | | | |
| 21180 - POSTCLOSURE MAINTENANCE | | | |
| 21190 - POSTCLOSURE LAND USE | | | |
| GAS MONITORING AND CONTROL SYSTEMS | | | |
| 20918 - EXEMPTIONS | | | |
| 20919 - GAS CONTROLS | | | |
| 20919.5 - EXPLOSIVE GAS CONTROL | | | |
| 20921 - GAS MONITORING/CONTROL | | | |
| 20923 - MONITORING | | | |
| 20925 - PERIMETER MONITORING NETWORK | | | |
| 20931 - STRUCTURE MONITORING | | | |
| 20932 - MONITORED PARAMETERS | | | |
| 20933 - MONITORING FREQUENCY | | | |
| 20934 - REPORTING | | | |
| 20937 - CONTROL | | | |
| GRADING/FINAL COVER | | | |
| 20650 - GRADING OF FILL SURFACES | | | |
| 21140 - FINAL COVER | | | |
| 21142 - FINAL GRADING | | | |
| 21145 - SLOPE STABILITY | | | |

| DRAINAGE AND EROSION CONTROL | V | A | NA |
|--|---|---|----|
| 20820 - DRAINAGE/EROSION CONTROL | | | |
| 21150 - DRAINAGE/EROSION CONTROL | | | |
| MONITORING AND CONTROL SYSTEMS | | | |
| 20790 - LEACHATE CONTROL | | | |
| 20830 - LITTER CONTROL | | | |
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| SECURITY | | | |
| 20530 - SITE SECURITY | | | |
| 21135 - SECURITY AT CLOSED SITES | | | |
| 21137 - STRUCTURE REMOVAL | | | |
| RECORDS | | | |
| 21130 - EMERGENCY RESPONSE PLAN | | | |
| 21170 - RECORDING | | | |
| 21200 - CHANGE OF OWNERSHIP | | | |
| CLOSURE PLANS | | | |
| 21880 - CERTIFICATION OF CLOSURE | | | |
| 21890 - REVISION OF APPROVED PLANS FOR C/P/C MAINT | | | |
| OTHER | | | |
| | | | |
| | | | |
| | | | |

COMMENTS (USE CIWMB 3 FOR ADDITIONAL SPACE)

SITE 1: Site inspection revealed no problem areas. Site looked excellent.

SITE 22: No deficiencies to report.

DOCUMENTS RECEIVED SINCE LAST INSPECTION 8/24/05:

None

APPENDIX H

CORRESPONDENCE



California Regional Water Quality Control Board

San Francisco Bay Region



Alan C. Lloyd
Secretary for
Environmental
Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.swrcb.ca.gov/rwqcb2>

Arnold Schwarzenegger
Governor

Date: MAY 12 2005
File No.: 2189.8009 (AVC)

Base Realignment and Closure
Program Management Office West
Attn: Mr. Richard Weissenborn, Lead RPM
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

Subject: Concurrence on the Final Site 1 Landfill Post-Closure Long-Term Monitoring Plan, Former Naval Air Station Moffett Field, Moffett Field, California, Revision 0, dated March 18, 2004

Dear Mr. Weissenborn:

Thank you for the Final Site 1 Landfill Post-Closure Long Term Monitoring Plan, Former Naval Air Station Moffett Field, Moffett Field, California, Revision 0, dated March 18, 2005, received on March 21, 2005, by the San Francisco Bay Regional Water Quality Control Board (Water Board). Water Board staff has thoroughly reviewed the final document and this letter presents our concurrence on the long term monitoring plan.

Please don't hesitate to call me at (510) 622-2353 or E-mail to AConstantinescu@waterboards.ca.gov if you would like to discuss this letter further.

Sincerely,

Adriana Constantinescu, PG
Project Manager – Moffett Field

cc: Ms. Lida Tan, Project Manager EPA
Ms. Sandy Olliges, Env. Services Director, NASA
Mr. Bob Moss, RAB Chairperson

C:\Moffett\MoffettFieldSite1\FinalLTMPConLetter.doc





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 26, 2005

Mr. Rick Weissenborn
BRAC Environmental Coordinator
Southwest Division
Naval Facilities Engineering Command
BRAC Operation Office
1230 Columbia Street, Suite 1100
San Diego, CA 92101-0961

RE: EPA Concurrence – Final Site 1 Landfill Post-Closure Long-Term Monitoring and Maintenance Plans dated March 18, 200⁵, Former Moffett Federal Airfield, Moffett, California

Dear Mr. Weissenborn:

The U.S. Environmental Protection Agency (EPA) received the Final Site 1 Landfill Post-Closure Long-Term Monitoring and Maintenance Plans dated March 18, 2005. EPA comments on the draft reports (September 14, 2004) have been adequately discussed and addressed in the draft final documents. EPA have no more comments on the subject reports.

If you have any questions, please feel free to call me at (415) 972-3018, or contact me by email at tan.lida@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Lida Tan", is positioned above the typed name.

Lida Tan
Remedial Project Manager
Superfund Federal Facility Branch
EPA Region 9

cc:

Ms. Adriana Constantinescu
Regional Water Quality Control Board
San Francisco Bay Region

1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Don Chuck
NASA M/S 218-1
Ames Research Center
Moffett Field, CA 94035

✓ Ms. Mary Parker
Remedial Project Manager
Southwest Division
Naval Facilities Engineering Command
BRAC Operation Office
230 Columbia Street, Suite 1100
San Diego, CA 92101-0961

Mr. Chris Rummel
Department of Environmental Health
County of Santa Clara Environmental Resources Agency
P.O. Box 28070
San Jose, 95159-4206

Mr. Tom Mohr
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

BRAC OFFICE

2005 JUN -6 A 6:13